

THE 25TH EUROPEAN CONFERENCE OF PSYCHOSOMATIC RESEARCH

Introductory Remarks

Fifty years after the first conference, the 25th European Conference of Psychosomatic Research 2004 will take place in Berlin. The German College of Psychosomatic Medicine is proud to host this renowned international meeting of European psychosomatic researchers. Our aim is to discuss new perspectives in the development, maintenance and treatment of diseases with an emphasis on biological, psychological and social aspects. Reference is made here to basic sciences, pathogenesis research, social sciences, care delivery research, and clinical application research. We are aware of the fact that this type of psychosomatic or behavioral medical research is not possible without the cooperation of physicians, psychologists, sociologists, and others, in an interdisciplinary network, and should reinforce the psychosocial focus of research, student training and clinical practice. This conference will thus promote an intensive scientific exchange of many professional groups on all levels. We are committed not only to a high scientific standard but also to excellent medical care. We attach importance to the scientific testing of psychotherapeutic treatment methods, which is an integral component of psychosocial care, especially here in Germany. This conference will therefore focus on differential indications as well as psychotherapeutic treatment methods in the short-term and long-term perspective. We hope that especially young, curious and ambitious researchers will use the opportunity not only to intensively discuss their own studies with older colleagues but also to exchange ideas on the perspectives of psychosomatic medicine in the coming years.

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President of ECPR
Professor of Psychosomatic Medicine and Psychotherapy
Charité – University Medicine Berlin
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Carl Scheidt
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Invited lectures

100 - EFFECTS OF A MULTIMODAL, BEHAVIOURAL INTERVENTION ON MYOCARDIAL PERFUSION IN PATIENTS WITH CHD Albus C, Theissen P, Griebenow R, Hellmich M, Son P, Wilhelm B, Schicha H, Köhle K. Dept. of Psychosomatics and Psychotherapy, Dept. of Nuclear Medicine, Clinic II of Internal Medicine, Dept. of Medical Statistics, University of Cologne, Germany

Recently, we have shown that our multimodal group intervention in combination with standardised cardiological care (INT), can promote health behaviour in patients with coronary heart disease better than standardised cardiological care alone (CO). Purpose of the actual study was to evaluate the effects myocardial perfusion (MP). We randomly assigned 77 patients (age 54+6,9 years, male 87%) with angiographically documented, clinically stable CHD to either INT (n=39) or CO (n=38). The multimodal intervention consisted of 24 sessions of group-psychotherapy, relaxation and exercise training, and information on diet, medication, etc., performed over a period of one year (total 77,5 h). Standardised cardiological care consisted of 3-6monthly contacts with a cardiologist, comprising guideline oriented diagnostics and medication, over a period of 3 years. A Thallium MP scintigraphy (after symptom-limited bicycle exercise test and at rest; 70 – 110 MBq Thallium-201, SPECT-technique) was performed at baseline, after 2 years, and 3 years, respectively. The course of MP was obtained by qualitative analysis (2 blinded, independent raters), indicating a diminished, stable, or improved MP within the affected artery territory. Patients having subsequent invasive coronary interventions were rated as having a diminished MP. Results were analysed on an intention to treat basis (last observation carried forward). 70/77 patients (91%) completed the study (drop-outs CO n=4, INT n=3). 11 patients (CO n=8, INT n=3) had subsequent invasive coronary interventions. After 2 years, 36/39 patients (92%) of INT showed a stable or improved MP, compared to 27/38 patients (71%) of CO (p=.019). After 3 years, MP was identical in INT, whereas only 25/38 patients (66%) of CO had a stable or improved MP (p=.011). These results indicate that our multimodal, behavioural intervention may have additional benefit on MP, compared to standardised cardiological care alone, over the course of 3 years.

316 - EMOTIONAL INHIBITION, BREATH HOLDING, AND SODIUM-SENSITIVE HYPERTENSION Anderson DE, Parsons B, Metter EJ. National Institute on Aging, NIH, Baltimore, Maryland, USA

Epidemiological studies have implicated high dietary sodium intake in the pathogenesis of hypertension, but the origins of human blood pressure sensitivity to high sodium intake remain to be clarified.

Previous studies with laboratory animals showed that a combination of high sodium intake and aversive behavioral conditioning elevated 24-hr blood pressure over periods of days, even though neither the high sodium intake nor the conditioning procedures alone had more than transient cardiovascular effects. A significant effect of the behavioral procedures was a progressive inhibition of breathing prior to task performance, which increased pCO₂, transiently acidified the plasma, and reduced renal sodium excretion. Since the experimental hypertension was not prevented by either renal denervation or adrenergic blockade, it was concluded that the sodium sensitivity was potentiated by the conditioned respiratory acidosis. Subsequent studies with humans have consistently shown large individual differences in resting pCO₂ associated with specific breathing patterns: slower frequency with higher pCO₂; higher frequency with lower pCO₂. Rapid breathing is associated with anxiety, and slower breathing with an alexithymic condition. A recent study showed that persons who describe themselves as having been under high stress for the past month breathed more slowly at rest than those under less stress. Experimental studies found that younger and older humans with higher resting end tidal CO₂ showed greater blood pressure sensitivity to high sodium intake than those with lower resting end tidal CO₂. A study is now in progress that tests the hypothesis that sodium sensitivity of blood pressure in humans is a function of an inhibited breathing pattern. Healthy men and women (ages 40 - 70) are placed on low (40 mmol) and high (280 mmol) sodium diets for 6 days each. Breathing and blood gases are recorded at rest at the beginning and end of each dietary period. Resting and 24-hr ambulatory blood pressures are also recorded at the beginning and end of each dietary period. Urinary sodium and natriuretic factors are also analyzed. Confirmation of this hypothesis would direct attention to the role of breathing in the prevention and treatment of sodium-sensitive forms of hypertension.

70 - EFFECTS OF A BEHAVIORAL INTERVENTION PROGRAM ON EXHAUSTION IN ANGIOPLASTY PATIENTS Appels A, Department of Medical Psychology, Maastricht, The Netherlands

Extreme fatigue is a common complaint in Percutaneous Coronary Intervention (PCI) patients, and is associated with an increased risk for new cardiac events. The objective of the EXhaustion Intervention Trial (EXIT) was to determine whether a behavioral intervention on exhaustion reduces the risk of a new coronary event. A new coronary event was defined as: re-PCI, CABG, MI, or cardiac death. 710 consecutive patients, aged 35-68, who felt exhausted after PCI were randomized into an intervention group and a usual care group. The intervention was formed by group therapy focusing on stressors leading

to exhaustion and on support of recovery by making rest more efficient. One month after PCI, 50% of the patients felt exhausted. The intervention reduced the risk of remaining exhausted at 18 months by 56% in those without a previous history of Coronary Artery Disease (CAD) (RR=0.44; 95% CI 0.29-0.66). The intervention did not reduce the risk of any new coronary event occurring within two years (RR = 1.14; 96% CI 0.82 – 1.57). Secondary analyses suggest that the intervention increased the risk of early events (i.e. events occurring within six months, caused by hyperplasia-restenosis) by reducing the reluctance to present anginal complaints (RR =1.88; 95% CI 0.99-3.58), and decreased the risk of late events (i.e. events occurring after 6 months, caused by progression of atherosclerosis) in those without a previous history of CAD (RR = 0.45; 95% CI 0.19-1.06). Conclusion: A behavioral intervention in PCI patients has a beneficial effect on feelings of exhaustion. It does not reduce the risk of a new coronary event in two years. Post hoc analyses suggest that a behavioral intervention may reduce the risk of late events.

309 - PSYCHOSOMATIC AND PSYCHOSOCIAL SERVICE SYSTEM IN SWITZERLAND Buddeberg C. Department of Psychosocial Medicine, Zürich, Switzerland

Switzerland is a small country in the heart of Europe. As well as the heart is a special organ of the human body, the health care system of Switzerland and the service system of Psychosomatic and Psychosocial Medicine are special and different of other European countries. The 26 Cantons of Switzerland have a great autonomy to organize not only the education, but also the health care system. The population of Switzerland with about 7.2 million residents is multicultural. There are four official languages, which are spoken in the country: German, French, Italian, and Rhaeto-Romanic. Psychosocial Medicine covers the psychological and sociological aspects of health and disease. In the service systems physicians – mostly psychiatrists – are involved in consultation –liaison services in university and county hospitals. Psychosomatic Medicine is not a separate medical specialty, as in Germany for example. There is a special qualification certificate called “Fähigkeitsausweis” for Psychosomatic and Psychosocial Medicine. Mainly general practitioners and specialists of Internal Medicine and Gynaecology/Obstetrics acquire this further qualification. They practise Psychosomatic and Psychosocial Medicine in their private practice or in hospitals as a kind of holistic approach of patient care. There are only small Departments of Psychosomatic Medicine integrated in Internal Medicine at the university hospitals of Basel and Berne. In Zurich, Lausanne and Geneva there exist Departments of Psychosocial Medicine at the university hospitals. There also are few rehabilitation hospitals with special departments of Psychosomatic Medicine for inpatient treatment. To summarize, the scene of Psychosomatic and Psychosocial Medicine in Switzerland corresponds with the diversity and beauty of the country. Its further development will mainly be influenced by the legal regulation of the compulsory health insurance which actually is in political discussion.

315 - PSYCHOSOMATIC AND COMPLEMENTARY MEDICINE: ALTERNATIVE PATHWAYS TO INTEGRATIVE MEDICINE Chesney MA. National Center for Complementary and Alternative Medicine, NIH, Bethesda, Maryland, USA

Research in psychosomatic medicine (PM) evolved over the past century from clinical observations that emotional conflicts play a role in the development of chronic physiological disorders. From these insightful, if pre-scientific, contributions has gradually emerged the modern era in which the behavioral, biological, and medical sciences combine to bring us closer to an understanding of how emotional adaptations to the past and current environment can sustain disruptions of homeostatic functions, and contribute to the development of disease. For clinically-oriented PM researchers, this science is designed to produce rationally-derived interventions in the causal pathways that can maintain health and prevent disease. Complementary and alternative medicine (CAM) practices, while widely used, are defined by the fact that they fall outside conventional (Western) medicine. The CAM domain most closely related to PM is that of mind-brain-body approaches, such as meditation, yoga, spiritual counseling and prayer, and coping interventions. Other domains range from non-Western medical systems, such as Ayurveda, to herbaltherapies. Current PM research focuses on

psychophysiological and molecular mechanisms with a goal of developing effective treatments. Current CAM research on the mind-brain-body domain is at an earlier stage of development, and has a dual focus. First, considerable attention is on studying the efficacy of mind-brain-body interventions because they are among the most widely used of all CAM approaches. Second, there is a growing emphasis on investigating the basic mechanisms hypothesized to underlie the CAM mind-brain-body intervention strategies. CAM research on causal pathways can be illuminated by PM advances in understanding of the role of the brain and behavior in endocrine, immune and autonomic function. CAM mind-brain-body interventions that prove efficacious and are integrated into medicine will lose their CAM distinction, and are likely then to fall into the domain of PM. As PM shares research advances in concepts and technology with CAM, and CAM brings a broader spectrum of interventions into consideration, the two could converge in a new synthesis for understanding mind-brain-body interactions and harnessing them to enhance health.

325 - GETTING PAPERS PUBLISHED IN A PSYCHOSOMATIC JOURNAL Creed F. Editor of the Journal of Psychosomatic Research. University Dept. of Psychiatry, Manchester Royal Infirmary, Oxford Road, Manchester.

In order to have a good chance of getting a paper published an author needs to understand something of the pressures on the editor. These include the maintenance of a steady flow of papers of sufficient quality to improve the impact factor of the journal. Getting rapid and high quality reviews for submitted is a constant pressure. Brief, clear and focussed papers are much less burdensome to review than long, complicated and poorly written papers; they are also better for the readership. Papers must be relevant to the stated aim of the journal. Tables are expensive to produce and should be kept to a minimum. Authors must stick to a few golden “do’s” and “don’ts”. For example do read and adhere to the instructions to authors published by the journal. Do keep the introduction and discussion section brief and focussed. Don’t present irrelevant or unreadable results. These and other suggestions will be discussed in the presentation in the hopes that participants in the session will be stimulated to think critically about their own papers.

326 - THE PSYCHOSOMATIC SYSTEM IN THE UK – DO SERVICES ADDRESS THE NEEDS OF PEOPLE WITH PSYCHIATRIC DISORDERS IN GENERAL MEDICAL SETTINGS? Creed F. Department of Psychiatry, University Manchester Royal Infirmary, Manchester, UK

Most psychiatric disorders in patients at general hospitals in UK are not treated adequately. Data will be presented to show that this is true for both out-patients and in-patients. The consequence is continued suffering, high levels of disability and high costs. Studies of consultation-liaison services have shown that they only see a small minority of the patients who have such anxiety and depressive disorders. There is a growth of specialist clinics but the only chance of arranging better services from GPs and hospital physicians and surgeons. This is only satisfactorily achieved in some parts of primary care and cancer health professionals. A recent systematic review indicated that experimental interventions for medically unexplained syndromes are more satisfactory than those in primary care probably indicating the high spontaneous remission rate in primary care and the more intensive interventions offered in secondary care. In spite of productive joint working between UK colleges of psychiatry, physicians and general practice, psychosomatic services in UK remain inadequate.

203 - THE COST-EFFECTIVENESS OF PSYCHOTHERAPY AND PAROXETINE FOR SEVERE IRRITABLE BOWEL SYNDROME Creed F. Department of Psychiatry, University of Manchester, United Kingdom

Background: Gastroenterologists do not have specific treatments for severe and chronic irritable bowel syndrome; this work assessed the effectiveness and costs of psychotherapy and an SSRI antidepressant in this population. Methods: Patients with severe and chronic irritable bowel syndrome were randomly allocated to receive either eight sessions of individual psychotherapy, or 20 mgs daily of the SSRI antidepressant, paroxetine, or routine care by gastroenterologist and

general practitioner. Outcome measures of health-related quality of life and healthcare costs were made one year later. Results: 257 subjects (81% response rate) from seven hospitals were recruited; 59/85 (69%) patients randomised to psychotherapy and 43/86 (50%) of the paroxetine group completed the full course of treatment. Both psychotherapy and paroxetine were superior to treatment as usual in improving the physical aspects of health-related quality of life (SF36 physical component score improvement: 5.2 (SEM=1.26) and 5.8 (SEM=1.0) v -0.3 (SEM=1.17), ($p<0.001$) but there was no difference in the psychological component. During the treatment period psychotherapy was the most expensive treatment ($p<0.05$). During the follow-up year, psychotherapy, but not paroxetine, was associated with a significant reduction of healthcare costs compared to treatment as usual ($p<0.05$). The reasons for this reduction are complex. At baseline, depressive and panic disorder predicted healthcare costs. Depressive disorder responded best to the paroxetine treatment but patients who reported a history of sexual abuse did particularly well with psychotherapy; they also showed greatest reduction of healthcare costs. The possible reasons for reduced healthcare costs will be discussed. Conclusions: Healthcare costs are high in patients with severe, chronic IBS. Both psychotherapy and paroxetine improve health-related quality of life at no additional cost. The mechanisms involved in each treatment appear to be different.

339 - THE DEVELOPMENT OF NATIONAL SYSTEMS OF HEALTHCARE IN THE EU-MEMBER STATES AND POTENTIAL CONSEQUENCES FOR PSYCHOSOMATIC CARE Danner G. Deputy Director of European Representation of German social Insurance

There is increasing financial pressure on all EU-models of generally accessible medical care. The socio-political answers offered range from arbitrary restrictions of access to care and related limitations to more financial burdens for the patient. The role of the EU has become more important in spite of the principle of "subsidiarity", i.e. national responsibility for social legislation and reimbursement practices. The European Court of Justice (ECJ) has opened the road for many patients on waiting-lists to look for care in other Member States where such restrictions do not apply. The "Open Method of Co-ordination" will serve the EU as a new strategic tool for the fine-tuning of national decisions on the formulation of health-policies; as will the definition of "best practices" and "centers of reference" for care. All three approaches require EU-wide definitions of goals, methods and standards. The EU-enlargement integrates rather weak systems characterized by legal or illegal co-payments. This rules out any "harmonization" of the different national systems since the standard thus attainable can be little more than the lowest common denominator. With severe restrictions on standard types of care, e.g. hospital financing, any addition of enriched forms of care is difficult. Psychosomatics / CL Psychiatry will be affected in various ways and will have to defend and to lobby for its position in competition with other forms of care, especially where resources are already weak and even acute care not always readily available. It will, however, also contribute to the ultimate quality of care as well as to a comprehensive treatment and may even positively influence medium to long-term expenditure per case. Trans-border activities and scientific presence and lobbying are of the essence to become integrated into new EU approaches and definitions.

322 - TYPE D PERSONALITY IN PERSPECTIVE

Denollet J. Medical Psychology, Department of Psychology and Health, Tilburg University, Tilburg, The Netherlands

Emotional distress has been associated with coronary heart disease (CHD) but little is known about the determinants of distress as a coronary risk factor. Inconsistent findings from Type A research have led to the ignorance of broad traits; yet, personality is a major determinant of individual differences in stress-related CHD. Recently, the distressed personality (Type D) was introduced to describe patients who simultaneously tend to (i) experience negative emotions (high negative affectivity) and (ii) inhibit the expression of emotions in social interactions (high social inhibition). Given this personality configuration, Type D patients are at increased risk for clustering of psychological risk factors and impaired quality of life. Accumulating evidence indicates that Type D is an independent risk factor for cardiovascular morbidity and mortality (ORs ranging from 4.1-8.9, $p<0.0001$). Type D personality predicts poor prognosis in cardiac

patients above and beyond depression. Physiological hyperreactivity and activation of proinflammatory cytokines may be responsible for this detrimental effect of Type D personality on prognosis. Type D patients also seem to benefit less from medical and invasive treatment. Recent findings showed that Type D was the most important predictor of poor prognosis in the RESEARCH trial of drug-eluting stents in the treatment of CHD. Overall, these findings indicate the emerging need to focus on personality factors in order to identify high-risk cardiac patients. Type D is a stable personality construct that may be of special interest in chronic cardiac conditions. Type D can be easily assessed with the DS14, a brief and psychometrically sound 14-item self-report scale.

327 - HEALTH CARE UTILISATION IN PATIENTS WITH CROHN'S DISEASE AND EFFECTS OF A PSYCHOSOMATIC TREATMENT

Deter HC. Department of Psychosomatic and Psychotherapy, Charité – University Medicine, Campus Benjamin Franklin, Berlin, Germany

Introduction: Health care utilisation has found a growing interest in patients with gastrointestinal disorders, especially in detecting and treating psychosomatic condition. High users of medical care have turned out to be a special therapeutic problem. Aim: We were interested in finding out 1) which are the conditions in care seeking behaviour in Crohn's disease patient 2) whether there are correlations with psychosocial factors 3) is medical care-seeking influenced by psychosomatic treatment? Methods: A one-year psychosomatic therapy study of 62 Crohn's disease patients from different gastroenterologic departments evaluated data from German insurance companies about patients sick leave, hospitalization days and medical visits over a four-year period before and during the study. Correlations with other somatic and psychologic variables were established. Results: Lost working days had increased continuously in CD patients to a mean of 60 days, hospitalization days had increased to a mean of 27 days in the first year of the study. There was a correlation between the extend of care utilization and gender (woman), depressive moods (BDI) and the Best index. Under psychosomatic treatment, there was a significant average reduction of days per year in the hospital and on sick leave. The number of visits to the outpatient clinics did not change. Multiple regression analyses detected as important predictors for the somatic cause of illness CDAI, use of steroids and depression. The amount of lost working days but no psychic factors at start of study predicts outcome in health care utilization in the course of disease. Discussion: Care-seeking behaviour proved to be an important variable in the course of disease. It correlated closely with the somatic course. Days in the hospital or on sick leave declined under psychosomatic treatment. As in earlier therapy studies of Crohn's disease patients, high utilizers are likely to profit from this type of treatment. Conclusion: The inclusion of care utilization data in the evaluation of the course of CD proved to be helpful, especially in high-utilizer Crohn's disease patients. Due to their economic importance, these objective variables should be included in future studies.

12 - NEW STRATEGIES IN PSYCHOSOMATIC RESEARCH

Dimsdale JE. University of California, San Diego, La Jolla, USA

This presentation will contrast psychosomatic research in 3 broad time bands: 1940-1969, 1970-1999, and likely directions in the opening decades of the 21st century. Organ systems studied, location of the research center, and research strategies will be discussed. The following areas seem particularly ripe for the 21st century: doctor-patient communication, cross-cultural communication, psychosocial functioning in extreme environments, extending studies of stress beyond the SNS and HPA axis to other communication systems such as cytokines, linking daytime and nighttime functioning, and emotional consequences of high technology biomedical intervention. While these developments pose major new challenges, it will also be important to continue emphasizing research into the effects of placebos in research design, how to facilitate the clinical encounter, and how to enhance adherence to complex regimens.

1 - IMPROVING COMMUNICATION: THE PATIENT PHYSICIAN RELATIONSHIP Drossman DA. Center for Functional GI and Motility Disorders, University of North Carolina, Chapel Hill, USA

Physicians are well aware that understanding and caring for some medical patients particularly those with psychosocial distress can be challenging. Even experienced clinicians may feel unable to reconcile the nature of symptoms and distress experienced by the patient with the observed data. Often, these differences are clarified with the incorporation of an effective biopsychosocial interview along with the use of skills that enhance the physician patient relationship. A positive relationship and an effective biopsychosocial interview will unveil associated symptoms and concerns that the patient may not have expressed previously and which may be contributing to the severity of the illness and its outcome. Therefore, characterization of psychosocial factors along including the understanding of the patient's illness schema, concerns and expectations is essential: this information has the potential to modify the illness experience and influence patterns of pain reporting and healthcare utilization. Effective communication within the physician patient relationship also has therapeutic value. Studies have shown that it can increase patient satisfaction with care, lead to greater adherence to treatments and even lead to a more favorable clinical outcome. This symposium will presented by international experts in the field will provide important information that will help the clinician understand the value of effective communication skills in enhancing the physician patient relationship.

9 - Psychosomatic Treatment of Irritable Bowel Syndrome: Lessons from a Drug and Psychotherapy Comparison

Drossman DA. Center for Functional GI and Motility Disorders, University of North Carolina, Chapel Hill, USA

Introduction: Our understanding of the benefits of antidepressants and psychological treatments in functional bowel disorders (FBD), including Irritable Bowel Syndrome (IBS) are limited, primarily due to research studies with small sample sizes or methodological limitations. We recently undertook a large multi-center study to assess the clinical efficacy and safety of cognitive-behavioral therapy (CBT) against education (EDU) and desipramine (DES) against placebo (PLA) in female patients with moderate to severe FBD (IBS, Functional Abdominal Pain, Painful constipation, and unspecified FBD). We also evaluated the amenability of clinically meaningful subgroups to these treatments. **Methods:** This randomized, comparator-controlled, multicenter trial enrolled 431 adults from the University of North Carolina and the University of Toronto with moderate to severe FBD symptoms. Participants received psychological (CBT vs. EDU) or antidepressant (DES vs. PLA) treatment for 12 weeks. Clinical, physiological and psychosocial assessments were performed prior to and at end of treatment. **Results:** The intention to treat (ITT) analysis showed CBT as significantly more effective than EDU ($p=0.0001$; Responder rate 70% CBT vs. 37% EDU; NNT=3.1). DES did not show significant benefit over PLA in the ITT analysis ($p=0.16$; Responder rate 60% DES vs. 47% PLA; NNT=8.1), but did show statistically significant benefit in the *per protocol* analysis ($p=0.01$; Responder rate 73% DES vs. 49% PLA; NNT=5.2) especially when participants with non-detectable blood levels of DES were excluded ($p=0.002$). Improvement was best gauged by Satisfaction with Treatment. Subgroup analyses showed that DES was beneficial over PLA moderate more than severe symptoms, abuse history, no depression, and diarrhea predominant symptoms; CBT was beneficial over EDU for all subgroups except for depression. **Conclusion:** For female patients with moderate to severe FBD, CBT is effective, and DES may be effective, when taken adequately. Certain clinical subgroups including patients with more severe symptoms or depression may be less amenable to these treatments.

43 - PSYCHOENDOCRINOLOGICAL AND - IMMUNOLOGICAL INDICATORS OF EXHAUSTION. IMPLICATIONS FOR PSYCHOTHERAPY Ehler U.

University of Zurich, Switzerland

Exhaustion is a subjective feeling of fatigue, lack of energy, irritability and demoralization. It is a serious symptom of a wide range of psychiatric, psychosomatic, and somatic disorders. In some cases exhaustion predicts the pathological state as a mental precursor, such

as in myocardial infarction. In other pathologies exhaustion is a consequence of the disorder (carcinoma or chronic pain), and finally some psychopathological conditions are predominantly described by exhaustion like the chronic fatigue syndrome or depression. Besides the diversity of underlying disorders a large body of literature supports the hypothesis that chronic stress promotes the onset or maintenance of exhaustion. Chronic stress may arise from adverse physical conditions or traumatic or critical life events together with low social support, high levels of anxiety or depressive mood. Interestingly, the endocrinological and immunological consequences of chronic or traumatic stress and those of exhaustion can be described by the same characteristic dysregulations of the HPA axis, i.e. a hyporeactivity of ACTH and cortisol, sympathetic arousal and elevations of distinct immune parameters, such as interleukin-6. Due to the fact that most of these data have been assessed via cross-sectional studies, up to now it remains unclear whether stress conditions cause such biological dysregulations or whether they are triggered by adverse genetic, prenatal or postnatal conditions. From that point of view it remains unclear which specific factors contribute to exhaustion and, as a consequence, psychotherapeutic interventions should have unspecific effects on the relief from exhaustion. But a growing number of studies show that physical and psychological activation together with cognitive reattribution in patients suffering from exhaustion does not only improve psychological well being but also normalize biological dysregulations. Taken together, future scientific work should focus on the psychobiological characterization of subtypes of exhaustion and its role in the aetiology and/or maintenance of the variety of disorders mentioned above. Successful outcomes from such studies would help to explain the effectiveness of existing psychotherapeutic treatments for the relief of exhaustion.

23 - DIFFERENTIAL LONG-TERM EFFECTS OF PHARMACOLOGICAL AND PSYCHOTHERAPEUTIC INTERVENTION IN AFFECTIVE DISORDERS Fava GA.

Affective Disorders Program, Department of Psychology, University of Bologna, Italy

A large body of evidence suggests that psychotherapeutic and pharmacological approaches are substantially equivalent in the treatment of the acute phase of mood and anxiety disorders. Their combination has been advocated as a strategy for obtaining a more sustained remission. The data, however, are rather conflicting. In mood disorders, the combination of pharmacotherapy and psychotherapy has yielded modest benefits, unless it was used in a sequential order (drug treatment in the acute phase of depression followed by psychotherapeutic management of residual symptoms). In anxiety disorders there are striking differences between the sustained recovery which can be obtained with cognitive behavioural strategies and the high likelihood of relapse when drug treatment is discontinued. Use of psychotropic drugs in affective disorders may result in short term benefits, but may be detrimental in the long-term.

3 - TEACHING PRIMARY CARE PHYSICIANS COMMUNICATION AND TREATMENT SKILLS FOR PATIENTS PRESENTING WITH FUNCTIONAL DISORDERS Fink P.

The Research Unit for Functional Disorders, Psychosomatics and CL Psychiatry, Aarhus University Hospital, Aarhus, Denmark

Patients presenting with medically unexplained physical symptoms (i.e. functional somatic symptoms) are very common in primary care. The GPs often find these patients frustrating and difficult to help, and that they are lacking the skills to treat them appropriately. We developed a new educational program, the TERM model (The Extended Reattribution Model), based on "The Reattribution Model", developed in the UK in the early eighties. The aims of the program were to offer general practitioners (GPs) a course in diagnosing and treating patients who present with functional somatic symptoms. It is intended that the educational elements of the course are acceptable and usable for all GPs in everyday clinical practice, irrespective of their qualifications. The objectives of the program are to 1) mediate knowledge about functional disorders, 2) introduce GPs to general interview technique and specific treatment techniques for functional disorders, and 3) mediate a change of attitude towards functional disorders. The effect of the educational program has been tested in 2 randomized controlled studies, including 78 GPs and about 4000

patients. The program and training principles will be presented in this presentation as well as some of the results of the effect on patients and GPs.

164 - HOW TO DIAGNOSE AND CATEGORIZE

SOMATIZING PATIENTS Fink P. The Research Unit for Functional Disorders, Psychosomatics and CL Psychiatry, Aarhus University Hospital, Aarhus, Denmark

The essential feature of somatization or functional disorders is that the patients present with morbid excessive illness worrying or with functional symptoms, i.e. medically unexplained symptoms. At present we do not have any general agreement on how to define and classify these patients. Many different functional syndromes have been introduced and each medical specialty seems to have developed their own syndrome alias, e.g. Chronic Fatigue Syndrome, Fibromyalgia and Irritable Bowel Syndrome. In DSM-IV and ICD-10 these illnesses are mainly classified as somatoform disorders. The validity of the diagnostic categories and definitions has been questioned both from a clinical and from a nosological point of view. The individual diagnoses or syndromes are defined in a poor and arbitrary way overlapping each other, and some of the diagnoses are too restrictive for use in clinical practice. No substantial empirical evidence for their validity exists. Establishing more valid diagnostic categories for somatoform disorders is therefore highly needed and one of the most challenging tasks in present psychiatric nosology. This paper will highlight problems in the current classification system and suggestions for new empirically founded diagnostic categories will be indicated.

197 - EMOTIONAL MEMORY AND BRAIN PLASTICITY: SIGNIFICANCE FOR THE UNDERSTANDING OF PSYCHOPATHOLOGY Flor H.

Central Institute of Mental Health Mannheim, Germany

Recent neuroscientific evidence has shown that the brain is plastic even in the adult age. Plastic alteration of brain areas involved in the processing of emotions occur especially when implicit emotional memories are created. The development and maintenance of posttraumatic stress disorder, chronic pain and tinnitus is discussed with respect to plastic changes related to emotional memories. We will also point out treatment implications of these findings.

130 - ANXIETY RELATED BRAIN MECHANISMS IN SOCIAL ANXIETY DISORDER Fredrikson M, Furmark T, Tillfors M. Uppsala University, Uppsala, Sweden

The central representation of social anxiety disorder (SAD) is not well studied. The aim here is to review brain activity data on anxious anticipation and symptom provocation before and after treatment with cognitive behavior therapy, and selective serotonin reuptake inhibitors (SSRIs) in patients with SAD. Using oxygen 15-labelled water, regional cerebral blood flow (rCBF) was assessed in previously untreated patients with SAD while speaking in front of an audience or alone (public and private speaking). Subjective anxiety ratings and heart rate were also recorded. During public vs. private speaking, anxiety increased more in SAD subjects than in a control group. This was associated with an enhanced rCBF in the medial temporal lobe including the amygdaloid complex. RCBF ratings correlated with right but not left amygdala rCBF. Cortically, brain flow decreased in the social phobics and increased in the controls more during public as compared to private speaking in the orbitofrontal and insular cortices as well as in the temporal pole. Brain blood flow increased less in the parietal and secondary visual cortices. Individuals who performed their private speech before their public, as compared to the reversed, experienced anticipatory anxiety. This was reflected in an increased heart rate and enhanced subjective anxiety ratings. Anticipatory anxiety was associated with an increased left amygdaloid rCBF. Thus, symptom provocation in social phobia activated the right amygdala, with fear ratings correlated with right but not left amygdalar rCBF, while anxious anticipation activated the left amygdala. Neurofunctional changes underlying treatment with citalopram and cognitive behavior therapy on regional cerebral blood flow included a decreased rCBF response to public speaking bilaterally in the amygdala, hippocampus, and the periamygdaloid, rhinal and perihippocampal cortices. This was associated with significant symptom improvement roughly equally for the two treatments,

whereas a waiting list group remained unchanged. Thus, similar sites of action for citalopram and cognitive behavior treatment on social anxiety were observed in the medial temporal lobe structures suggesting a common final pathway for pharmacological and psychological treatment.

244 - BRAIN-GUT INTERACTIONS IN IRRITABLE BOWEL SYNDROME Fukudo S. Department of Behavioral

Medicine, Tohoku University Graduate, School of Medicine, Sendai, Japan

The gastrointestinal tract has autonomous activity and responds to the luminal stimuli moment-to-moment. It has also been known that central nervous activity influences on the bowel function. Recent advances in research clearly demonstrate mutual and reciprocal interactions between these two organs. These phenomena, the brain-gut interactions, are believed to play a major role in pathogenesis of functional gastrointestinal disorders. Irritable bowel syndrome (IBS) is a prototype of functional gastrointestinal disorders. The brain-to-gut effects and the gut-to-brain effects are supposed to form complex circuits. Psychosocial stress is known to exacerbate IBS symptoms. Many neurotransmitters are supposed to be involved in these mechanisms. Corticotropin-releasing hormone (CRH) is one of the most plausible candidates to play a crucial role in pathogenesis of IBS. Stress releases hypothalamic CRH, resulting pituitary secretion of adrenocorticotrophic hormone (ACTH). Exogenous administration of CRH, intracerebroventricularly or intravenously, accelerates colonic transit. CRH mildly provokes colonic motility in humans. In the IBS patients, CRH stimulates colonic motility more prominently. ACTH secretion to CRH in the IBS patients is also exaggerated. CRH antagonists inhibit stress-induced alterations in the colonic motility both in animals and humans. Studies on gut-to-brain direction are more focused on the research. Repetitive mechanical stimulation of the sigmoid colon provokes increase in colonic motility in the descending colon of IBS patients, suggesting visceral hyperalgesia and simultaneous abnormal intramural reflex. Cerebral evoked potentials are obtained using EEG recordings during the gut stimulation. IBS or dyspepsia patients have abnormal patterns of viscerosensory evoked potentials. IBS patients were reported to have abnormal activation patterns of the regional cerebral blood flow in response to the mechanical distention of the rectum. Therapeutic approach for IBS should be performed along these knowledge. Further investigations on reciprocal brain-gut interactions in IBS is warranted.

331 - PSYCHOSOMATICS AND GENETICS: A GOOD MATING De Geus E. Department of Biological Psychology, Faculty of Psychology and Education, Vrije Universiteit, Amsterdam, The Netherlands

Behavior genetics research has shown important genetic contribution to virtually all of the known risk factors for cardiovascular disease. Multivariate analysis has further shown that tracking of single risk factors, as well as their comorbidity (as in the metabolic syndrome) is largely due to genetic factors. A brief overview of this literature will be presented, with an emphasis on twin studies. It will be further argued that the significant heritability of risk factors is of direct relevance to psychosomatic medicine. By lumping together subjects that are genetically sensitive to the effects stress or lifestyle with those that are not, classical stress studies may have attenuated significance of negative health effects in the former group. Future research, therefore, should emphasize the genetic perspective, e.g. looking explicitly at gene-stress and gene-lifestyle interactions, rather than stress or lifestyle effects per se. An crucial first step towards the "ideal" studies of gene by stress/lifestyle interaction is the identification of the actual genes that convey disease risk. In gene finding studies, geneticists are increasingly relying on endophenotypes, i.e. traits like autonomic nervous system activity and neuroendocrine reactivity. The huge expertise of psychosomatic researchers on this topic makes them ideal partners in gene finding. The viability of psychosomatic endophenotypes for gene finding will be shown by an overview of our twin studies on hormonal and cardiovascular activity during laboratory stressors and ambulatory monitoring.

235 - ATTACHMENT AND PAIR BONDS IN TREE SHREWS: PROXIMATE CAUSES AND PHYSIOLOGICAL CONSEQUENCES Von Holst D.

Department of Animal Physiology, University of Bayreuth, Germany

Tree shrews (order Scandentia) are small diurnal mammals distributed throughout Southeast Asia. In the wild, they usually live in pairs in territories. Contrary to expectations, housing of a male and a female together results mostly in an "unharmonious pairing" characterized by social tension, as evident from occasional fights, avoidance behaviour, and increased heart rates. In about 20% of all pairings, however, contact between an unfamiliar male and female is characterized from the outset by amicable behaviour: Both individuals groom and "greet" each other frequently with long bouts of mouth licking. They eat and rest together and always sleep in the same nestbox. Furthermore their heart rates as well as the serum levels of cortisol and epinephrine are reduced and several indicators of immune function show improvement; the opposite is found in unharmonious pairings. After separation of the pairs, the physiological data of the individuals not only return to initial levels, but change in opposite directions: Compared to the situation before the pairing the welfare of former harmonious pair is diminished, while it is improved in unharmonious pairs. The quality of a pairing is based on individual preferences of the females for the scent of the males: A male that has been fiercely rejected by one female may be accepted immediately by another female. If females are given the opportunity to choose between several males, there is incest avoidance; furthermore, sisters show a preference for the same males which indicates a genetic base (involvement of the MHC-complex) for the females' choice. Supported by the Volkswagen Foundation (I/67034).

307 - PSYCHOSOMATIC TREATMENT IN EUROPE:

THE GERMAN SITUATION Koch U, Barghaan D, Harfst T, Schulz H. Medical Psychology, University Clinic Hamburg, Germany

A representative, population-based study in Germany revealed a one-year prevalence for psychological morbidity of more than 30%. This finding is in line with results from similar studies conducted in the US. The most common diagnoses were somatoform disorders, phobias, major depression and alcohol-related disorders. To date, however, availability and quality standards of professional counselling for people suffering from psychological disorders has not been systematically reviewed. In an expert report commissioned by the Robert-Koch-Institute, we have elaborated a comprehensive overview of available in-patient and out-patient care using documentation obtained from health care providers, governmental institutions, and research societies as well as published data from psychotherapy research and our own studies. Here, we present results based on treatment provided by psychotherapists in residence, psychotherapeutic out-patient clinics and counselling institutions as well as specialised psychotherapeutic and psychosomatic in-patient centres for rehabilitative care and psychiatric or psychotherapeutic hospitals. Health care availability and utilisation, psychotherapeutic treatment guidelines, clinical and sociodemographic data from treated patients and clients respectively are reviewed. Findings are evaluated with respect to the state of professional education in the field, quality management, and treatment efficacy. Current trends in German psychotherapeutic health care are discussed and potential (or: possible) improvements are outlined.

253 - PHYSICIAN-PATIENT-RELATIONSHIP AND RECOGNITION OF MENTAL DISORDERS IN

PRIMARY CARE Kruse J, Schmitz N, Heckrath C, Wöller W. Psychosomatic Medicine, Heinrich-Heine University Düsseldorf, Germany.

Background and Objectives: The aim of the study is to evaluate the influence of the consultation process on the identification of psychological disorders in GPs' practices. **Methods:** In 16 primary care practices, 120 consultations with patients fulfilling the criteria of a DSM-III-R-defined mental disorder were investigated. Identification of mental disorder by the GP was measured by comparing the diagnoses obtained by GPs' with those obtained by a trained clinician using the Structured Clinical Interview for DSM-III-R disorders. Consultations were transcribed and patients' complaints were classified according to the Reason for Visit Classification Scale. The GPs' interaction behaviour was assessed on the basis of Structural

Analysis of Social Behaviour (SASB). To measure the length of doctor-patient interaction, the number of words spoken by doctor and patient was determined. **Results:** GPs recognised at least one psychological disorder in 60.8% of all 120 patients. A larger number of presented psychological complaints (OR: 8.63; 95% CI: 1.98 to 37.6), length of the consultation (large number of spoken words, OR: 8.00; 95% CI: 1.24 to 51.7) and a lower level of GP's control of the communication process in terms of SASB (OR: 4.86; 95% CI: 1.35 to 17.58) was connected with a better case identification by the GP. **Conclusions:** The arrangement of the doctor-patient interaction has an impact on the identification of psychological disorders. Training of communication skills for general practitioners seems to be necessary to increase identification rates of psychological disorders.

284 - BIOLOGICAL FINDINGS IN PTSD: CAN THEY BE CHANGED BY PSYCHOTHERAPY? Lamprecht F, Sack M.

Department of Psychosomatic Medicine, University Medical Center, Hannover, Germany

There are more than 30 neuroimaging studies (MRI, fMRI, PET, SPECT) with quite a variety of findings in more than 400 PTSD patients altogether. The more consistent findings are a decreased hippocampal volume, increased amygdala activity and decreased activity in the medial prefrontal cortex (including Broca's region). For a reversal of these findings by psychotherapy up to now there is only anecdotal evidence. A brief outlook on ongoing research projects at Yale, Stanford, NIMH and Amsterdam is given. What the neuroendocrinological changes in PTSD patients are concerned there are also numerous findings showing an alteration in cortisol related stressregulation but only limited evidence on how they can be modified by psychotherapeutic means. We will further report results from 2 studies in our department. 1. Ten patients suffering from post-traumatic stress disorder (PTSD) following a severe traumatic event, were assessed with event-related brain potentials (ERPs) in a modified oddball paradigm containing auditory standard, target, and novel tones. ERPs were assessed before and after a treatment session using the eye-movement desensitization and reprocessing method (EMDR). Compared to a control group that underwent sham treatment, ERPs of the patients showed a reduction of the P3a component in the post-treatment recording, suggesting a reduced orienting to novel stimuli and reduced arousal level after the treatment. Moreover, psychometric assessment revealed a marked improvement of the PTSD symptoms after treatment as well as during a 3 month follow-up. 2. We investigated changes of stress related psychophysiological regulation of psychotherapeutic treatment (EMDR) for PTSD patients. Following a partial wait list design 16 patients with PTSD underwent psychometric (PDS, IES, STAI) and psychophysiological assessment (HR, RSA) during presentation of their individual trauma script before and after treatment and at 6-month follow-up. Trauma specific treatment with EMDR (mean 4.7 sessions) was administered. Pre-vs. posttreatment as well as pre-vs. follow-up comparison showed significant decreases in all symptom measures. Stress related HR acceleration during trauma script decreased significantly while RSA indicating parasympathetic tone increased. Reduced psychophysiological stress reaction and heightened parasympathetic tone after treatment might be the result of improved psychophysiological regulatory capacities after successful trauma therapy.

341 - NEURAL SUBSTRATES OF IMPLICIT AND EXPLICIT EMOTIONAL PROCESSES: IMPLICATIONS FOR PSYCHOTHERAPY Lane DR.

University of Arizona, Tucson, USA

A fundamental goal of psychotherapeutic work is to promote the patient's ability to become consciously aware of his or her own emotional responses. In this talk I will present evidence that the conscious awareness of emotion is a separate domain of cognition, that the transition from unconscious (implicit) to conscious (explicit) emotional processes can be understood developmentally and that explicit emotional processes have a modulatory effect on implicit processes. A cognitive-developmental model of emotional awareness will be presented that holds that the ability to become consciously aware of one's own feelings is a cognitive skill that goes through a developmental process similar to that which Piaget described for other cognitive functions. This model can be used in both normative and clinical contexts. A parallel hierarchical model of the neural substrates of emotional experience will be presented next supported by recent

neuroimaging work. I will argue that the neural substrates of implicit and explicit emotional processes are distinct and will discuss the neural substrates of implicit emotion and three distinguishable aspects of explicit emotional processing: background feelings, focal attention to feelings and reflective awareness of feelings. The conscious processing of affective states requires participation of structures that subserve attention and mental representation that are not unique to emotion. The domain-general (i.e. not specific to emotion) function of these structures may help to explain the vast individual differences that are observed clinically in the ability that people have to monitor and report their own emotions. The implications of this psychobiological model for key issues in psychotherapy will be presented next. These include how emotional awareness can be promoted in a variety of clinical contexts, including that in which the patient's ability to consciously process feelings is initially limited.

340 - MEDICAL UPDATE: PSYCHOSOMATIC DISEASE AND THE BRAIN Lane DR. University of Arizona, Tucson, USA

The literature on functional neuroimaging is expanding exponentially because the spatial scale captured by PET and fMRI corresponds exactly to the scale of the distributed neural networks that mediate complex cognitive and emotional functions. This new technology therefore presents unprecedented opportunities to bring the brain into mind-body medicine. Research on how functional brain activity contributes to the pathophysiology and clinical course of various physical diseases is in its infancy, but functional imaging research is already generating findings that are relevant to psychosomatic medicine. One critical area is that involving emotion and emotion regulation. The critical brain areas involved are being identified through a combination of research strategies involving functional imaging in healthy volunteers, patients with brain lesions, and animal studies. A more recent development is the investigation of functional brain activity during the actual execution of emotion regulation strategies such as reframing. Findings from research on rumination and alexithymia will also be reviewed in this section. A related area of research is that of the central regulation of autonomic control. Exciting work has appeared in recent years on the neural regulation of skin conductance (purely sympathetic), vagal tone, and respiratory drive, as well as new work on interoception and visceral awareness. There are several clinical entities that have been investigated in some depth recently. These include functional GI disorders, pain, depression and anxiety disorders. A few studies have been performed on conversion disorders. Finding from these clinical conditions will be selectively reviewed. A variety of treatment modalities relevant to psychosomatic medicine have been investigated with functional imaging, including comparisons of the brain changes induced by pharmacotherapy vs. cognitive-behavioral therapy. Other modalities that have been studied with functional imaging include meditation, acupuncture and placebo. These treatment studies will be selectively reviewed from the standpoint of whether they work by influencing those neural processes involved in emotion and emotion regulation.

302 - PSYCHOTHERAPY AND PHARMACOTHERAPY IN DEPRESSIVE DISORDERS Linden M. Research Group Psychosomatic Rehabilitation at the Charité, University Hospital Benjamin Franklin, and the Rehabilitation Centre Seehof, Teltow/Berlin, Germany

Depressive disorders are a heterogeneous group of disorders, varying in respect to quality of the psychopathology, severity, cause, course and treatment needs. The repertoire of treatment options for depressive disorders therefore is widespread including self-help, pharmacotherapy, psychotherapy, ECT, sleep deprivation, somatic treatments and social interventions. When comparing psychotherapy and pharmacotherapy both have shown in controlled clinical trials to be effective treatments in depressive disorders by reducing scores on psychopathology scales, such as the Hamilton Depression Inventory, for about 50% in about two thirds of patients. Combination seems to work better than either alone, especially when it comes to relapse rates. General clinical and evidence based decision rules can be outlined, which help to select the best treatment of each patient. Melancholic depression, higher severity and/or the need for immediate treatment response speak in favour of pharmacotherapy. Chronic

depressive adjustment disorders, lasting negative life events, or neurotic comorbidity favour psychotherapy.

123 - PSYCHOPHARMACOLOGICAL TREATMENT OF PATIENTS WITH PSYCHOSOMATIC AND RELATED DISORDERS Malt UF. Rikshospitalet, University of Oslo, Norway

Objectives: To review the current evidence based status of psychopharmacological treatment of psychosomatic and related disorders. Methods: A review of the databases Clinical evidence, Cochrane Library of Systematic Reviews, American College of Physicians (ACP) Journal club; Evidence based mental health, the TRIP database and MEDLINE supplemented by clinical practice and experience. Results: The number of randomised control trials (RCT) of psychosomatic disorders are very limited and hampered by insufficient diagnostic workup, low statistical power and failure to sort of the results explained by effects on comorbid psychiatric disorders (e.g. depression). Psychosomatic disorders associated with comorbid psychiatric disorders; stress or brain dysfunctions show best response to psychopharmacological treatment. Conclusions: By 2004, psychopharmacological treatment of psychosomatic disorders cannot be evidence based. Clinical experience and judgement is still the key to treatment success. It is unlikely that the current way of selecting pts for RCTs (i.e. DSM-IV or ICD-10 diagnoses) will prove to be a fruitful way of improving psychopharmacological treatment of psychosomatic disorders in the future.

318 - PSYCHOSOMATIC THERAPY IN SOMATIZATION DISORDERS: A MANUAL ON PSYCHODYNAMIC-INTERACTIONAL GROUP THERAPY FOR THE TREATMENT OF SOMATOFORM PAIN DISORDERS Nickel R, Egle UT. Clinic for Psychosomatic Medicine and Psychotherapy, University Hospital Mainz, Germany

20%-40% of the patients in general practices, as well as in different departments in hospitals, suffer from somatoform diseases. 70% of these patients have pain as their main complaint. This treatment manual is the first disease-specific, psychodynamically oriented treatment for these patients. Compared to other psychodynamic treatment settings this therapy is a short and cost-effective approach to treat these patients. It is based on a so-called psychodynamic-interactional group psychotherapy and focuses on disease-specific parts of the problem, as well as on psychic and interpersonal problems resulting from adverse childhood experiences. Over a period of six months between 7 and 9 patients are treated in 40 group therapy sessions. Two weekly meetings are held during the first four months and one weekly session is held during the last two months. The concept contains psycho-educational elements, the discussion and formulation of individual treatment goals as well as work with a psychodynamic and relationship-oriented treatment focus. The efficacy of this concept is planned to be evaluated in a randomised, controlled clinical trial, including two treatment conditions and one control condition. One of the two treatment conditions is, beneath the concept already discussed, a cognitive behavioural group therapy. This study is funded by the Deutsche Forschungsgemeinschaft (DFG).

330 - EDUCATING PHYSICIANS TO HEAL AS WELL AS CURE: PSYCHOSOMATIC MEDICINE IN THE MEDICAL SCHOOL CURRICULUM Novack DH. Associate Dean of Medical Education, Drexel University College of Medicine, Philadelphia, USA

Despite widespread acknowledgment of the utility of the biopsychosocial model for medical education, medical education in United States is still predominantly biomedical. Several recent reports from prestigious American institutions, including the National Academy of Science, the Institute of Medicine, and American Association of Medical Colleges have emphasized the need for more comprehensive biopsychosocial education, and several of these reports have stressed the importance in exposing students to the science of Psychosomatic Medicine. Dr. Novack is past president of the American Psychosomatic Society, and past chair of that society's Professional Education Committee, which developed a model curriculum and published a survey in Psychosomatic Medicine of medical school

curricular needs. He was also on an Institute of Medicine committee that issued a recent report on enhancing social and behavioral science education in undergraduate medical curricula. He will summarize all of this work, propose the components of an ideal curriculum in Psychosomatic Medicine, and discuss how this curriculum might be integrated throughout the undergraduate medical education continuum.

195 - THE NEW CARDIOVASCULAR DISEASE PREVENTION CONCEPT IN EUROPE Orth-Gomer K. Karolinska Institute, Stockholm, Sweden

The European concept of Cardiovascular Disease Prevention relies upon devolved responsibilities, as each of the European countries needs to develop multi-professional national guidance on prevention and ensure that it is effectively communicated implemented and evaluated. It also relies on interdisciplinary and inter-professional collaboration between organizations such as the European Society of Cardiology (ESC), European Societies of Hypertension, of Atherosclerosis, of Diabetes, and societies of psychosomatic and behavioral medicine. Since the first issue of CVD prevention guidelines in 1994, a gradually increasing involvement from the other societies has been developed. The Third Joint European Societies Task Force thus included eight societies from various related disciplines concerned with prevention on a national and on a European level. The new interdisciplinary concept was launched in 1999 when a European Forum on Cardiovascular Disease Prevention was convened at the Heart House and attended by 162 representatives from 41 European countries. At this occasion the need for knowledge and skills about the behavioral and psychosocial barriers to life style change were addressed. Patients and people who are socially and economically disadvantaged, who are exposed to stress at work and outside work, who experience negative emotions such as depression and anger and who lack social support, need special preventive attention. In 2003, for the first time in Europe, the need and methods to address such barriers were acknowledged and included in the European Guidelines on CVD Prevention. The author coordinated the psychosocial writing group, which included members from International Behavioral Medicine and the German Psychosomatic Medicine.

209 - WOMEN'S MULTIPLE STRESSORS AND HEALTH IN MODERN SOCIETY: MECHANISMS AND INTERVENTIONS Orth-Gomér K. Karolinska Institute, Stockholm, Sweden

European women's lives are undergoing rapid transitions; from a sheltered and stable family life as mothers and housewives, a majority of European women are now combining the ambitions of a professional career and financial independence with the role as nurturer, homemaker and mother. This transition is not without problems and some of the reactions to role change are common to most European women. This includes the systematic involvement of women in demanding job careers, while many preserve their traditional role at home. Swedish women were among the first in Europe to reach and maintain men's rate of employment outside home. This was possible due to a generous welfare program which included well organized day care for pre-school children, free education from elementary school to university and maternity leave with almost full salary for a year after each childbirth. In spite of these advantages, women do encounter a number of difficulties due to stress exposure at work and at home, particularly dangerous when these occur in combination. In recent years Swedish women had the highest and most steeply increasing work absenteeism among Europeans and the causes are ascribed to multiple stressor exposure. We have followed 600 Stockholm women, aged 30-65 years for ten years; half of them had been hospitalised for acute coronary syndrome and half were randomly obtained from the normal Stockholm population. Exposure to social stressors, including work stress, family stress, socio-economic disadvantage, social isolation and depressive reactions were determinants of recurrent clinical coronary events and of progressing underlying coronary artery disease. These effects are mediated by unhealthy habits; sedentary life style with poor sleep quality and physiological dysfunction assessed as autonomic cardiac imbalance and HPA axis dysfunction. Intervention modalities include mastery and anti-stress techniques. The effects are being evaluated.

139 - DEVELOPMENT OF THE ALEXITHYMIA

CONCEPT Von Rad M, Gundel H. Department of Psychosomatic, Psychotherapy and Medical Psychology, Munich, Germany

Alexithymia (from the Greek 'a' for lack, 'lexis' for word, and 'thymos' for emotion) refers to a specific disturbance in emotional processing that is manifested clinically by difficulties in identifying and verbalizing feelings, in elaborating fantasies and by a tendency to focus on and amplify the somatic sensations accompanying emotional arousal. Nowadays, alexithymia is conceptualized as multifaceted and dimensional, rather than a categorical construct. Salient features are the inability to distinguish one's feelings from the accompanying bodily sensations, the inability to communicate feelings to others, and an externally orientated cognitive style reflecting an absence of inner thoughts and fantasies. These three lower-order concepts reflect separate, yet empirically related, facets of the alexithymia construct. Different proposals to measure alexithymia have been put forward, but scientific agreement on this issue has not been achieved yet. Referring to the neurobiological basis of alexithymia, a structural/cerebral deficit was hypothesized as early as in the end of the 70's. MacLean inferred that the limbic system ('visceral brain') functions as a crude analyzing mechanism that derives information and interprets experience in terms of emotional states instead of symbolic thoughts. He further speculated that, instead of being related to the neocortex (which he referred to as the 'word brain'), distressing emotions find immediate expression through autonomic pathways. Nemiah suggested a neurophysiological dysfunction, due to a "lack of adequate neuronal connections" between limbic system and neocortex. Theories further evolved from Nemiah's 'vertical' model to a 'horizontal' model. Hoppe and Bogen observed a paucity of fantasies, difficulty in describing feelings and an operative style of thinking in 12 "split-brain" individuals (ie, patients who had undergone cerebral commissurotomies for treatment of intractable epilepsy). Thus Hoppe assumed a "functional commissurotomy" in alexithymia. Numerous studies were then conducted, hypothesizing an hemispheric specialization, and/or an interhemispheric transfer deficit in alexithymia. Nowadays alexithymia is also linked to reduced activation especially of prefrontal cortex regions. To sum up, this lecture will give an overview about the historical development of the alexithymia concept, its measurement and its neurobiological foundations.

2 - PSYCHOSOCIAL INTERVENTIONS: ARE THEY EFFECTIVE IN CLINICAL CARDIOVASCULAR

CARE? Schneiderman N. University of Miami, Coral Gables, Florida, United States

Psychosocial intervention trials with post-myocardial (MI) patients have produced mixed results concerning hard medical endpoints (e.g., mortality; recurrent M.I.). The major randomized clinical trial (RCT) reporting positive results was the Recurrent Coronary Prevention Project (RCPP), whereas the major study reporting null results was the Enhancing Recovery in Coronary Heart Disease (ENRICHD) trial. Both studies reported positive psychosocial findings. Patients in the RCPP were primarily white men, who received group based Cognitive Behavior Therapy (CBT) for up to 4.5 years. In contrast, participants in ENRICHD included large numbers of women and minorities as well as white men; only 31% of CBT patients received group therapy; and CBT lasted 6 months or less. Secondary analyses conducted on ENRICHD data suggest that CBT decreased recurrent MI in white men and that patients who received group based CBT showed a decrease in medical endpoints regardless of gender or ethnicity. Results of RCT suggest that psychosocial interventions can improve quality of life and may have a beneficial effect on hard medical endpoints in post-MI patients. The potential effectiveness of psychosocial interventions in clinical cardiovascular care will be discussed within the context of present limitations of existing RCT as well as what we have learned from less rigorous trials and meta-analyses.

92 - NATIONAL/REGIONAL GUIDELINES IN MEDICINE: USEFUL BUT NOT A PANACEA.

Schneiderman N. University of Miami, Coral Gables, United States

Clinical practice guidelines are often used to match the intensity of preventive therapy to the magnitude of absolute risk. Systems such as the Framingham Global Risk Assessment have scored age, cholesterol, smoking and systolic blood pressure to calculate absolute risk. Improvements in these calculations has been brought about by added

consideration of diabetes mellitus and metabolic syndrome as reflected in the National Cholesterol Education Program (2001) and the new European Guidelines on Cardiovascular Disease Prevention (2003). In addition to traditional risk factors physicians need to be aware of the risk to individual patients related to inflammation, psychosocial risk factors, family history of heart disease and other variables. Age may be a surrogate for plaque burden. Depression may increase risk through behavioral (e.g., smoking) or psychophysiological (neuroendocrine) pathways or may reflect inflammation. Stress may interact with experienced hostility and excess alcohol consumption. Whereas some Global Risk Assessment scoring systems show decreased predictive risk for smoking in patients over 60 years of age, a patient may present with emphysema, which would increase mortality risk. Thus, while Global Risk Assessment is predictive at a population level, a comprehensive understanding of psychosocial, behavioral and biological factors in individual patients can improve upon global assessment. The new European guidelines (2003) are helpful in determining how as well as when to carry out preventive measures. They can be a useful tool for the physician. Randomized clinical trials such as the Diabetes Prevention Project (2002) and the Recurrent Coronary Prevention Project (1986) have begun to provide a foundation for behavioral and psychosocial interventions.

20 - SOCIAL INEQUALITIES IN HEALTH: NEW EXPLANATIONS AND IMPLICATIONS FOR PREVENTION

Siegrist J. Institute of Medical Sociology, University of Duesseldorf, Germany

Substantial social inequalities in health continue to exist in modern societies including European countries, despite expanding health care costs and medical progress. Most importantly, a social gradient of major chronic diseases in midlife and early old life is obvious: the higher one's socio-economic position (SEP) in society (as measured by education, occupational status and income) the lower the risk of morbidity and mortality. This gradient is not well explained by differential access to, or quality of, health care, nor is it sufficiently accounted for by health-adverse behaviours although these are important in mediating SEP with elevated risk of disease. More recently, the following explanations were advanced in social epidemiological and psychosomatic research: 1. social disadvantage in early life; 2. exposure to stressful psychosocial environment in adult life; 3. macrosocial determinants of morbidity and mortality (aggregate deprivation, poor social capital). In this presentation, selective evidence on each one of these approaches is given, with particular emphasis on exposure to a stressful psychosocial work environment. This is justified by the fact that rapid progress has been achieved in this area of research in understanding the links between SEP and stress-mediated disease development. In the final part, implications of current knowledge for preventive efforts are discussed at three levels: individual, interpersonal and structural. Although additional experience from intervention studies is needed it is concluded that the main challenge in this area is the gap between science and health policy.

13 - PSYCHOBIOLOGICAL PROCESSES IN CORONARY HEART DISEASE

Steptoe A. University College London, UK

Psychosocial factors such as low socioeconomic position, social isolation, chronic work stress and depression are associated with the long-term development of coronary heart disease (CHD). In patients with established CHD, psychological experiences such as episodes of anger and stress may trigger acute cardiac events. The pathways underlying these effects are beginning to be uncovered using psychobiological methods. Chronic psychosocial adversity is associated with higher levels of inflammatory markers such as C-reactive protein and human heat shock protein 60, and markers of disturbed endothelial function like von Willebrand factor. Psychological stress also stimulates inflammatory cytokine release, endothelial dysfunction and procoagulant haemostatic responses. Our recent work has also shown that people who are at greater risk of CHD by virtue of lower socioeconomic position display heightened stress-induced increases in proinflammatory cytokines, and more prolonged cardiovascular and haemostatic responses. The triggering of acute cardiac events may be sustained by different processes, notably stress-induced myocardial ischemia and platelet activation associated with

plaque rupture. The combination of clinical cardiologic and psychosomatic methods with psychobiological stress testing may produce new insights into the ways stressful psychological experiences are translated into increased vulnerability for CHD.

182 - ATTACHMENT: THE MISSING DEVELOPMENTAL LINK IN COPING THEORIES?

Strauss B. Institute of Medical Psychology, University of Jena, Germany

Clinical attachment research has received considerable attention during the last decade. One focus of this research is the investigation of attachment representations and styles as an organizer of the processing of emotions in threatening life situations. In adults, illness and physical impairment can be seen as a threat from an attachment perspective. The paper reviews some models related to the role of attachment in the development of coping strategies directed towards stressful situations including illness. Several studies conducted at the institute of medical psychology during the recent years will be described: These studies focus on hypotheses on the relationship between specific coping strategies and attachment styles (obtained either via questionnaires or via the adult attachment prototype rating) in subsamples of patients suffering from somatic disorders (e.g. neurodermitis, diabetes etc.). The results indicate that attachment related construct could substitute the missing developmental link in current theories of coping.

7 - THE INFLUENCE OF DIFFERENT COUNTRIES AND CULTURES ON HEALTH - A GROWING FIELD IN PSYCHOSOMATIC MEDICINE

Theorell, T. National Institute for Psychosocial Medicine (IPM), Stockholm, Sweden

Two seemingly different fields of observation constitute the basis for this lecture. They are both related to the rapidly increasing exchange of leadership styles and exchange of people across countries. One study was performed in collaboration with the Finnish National Institute for Work Hygiene. The researchers wanted to explore the effects of the merger of two large industry corporations, one Swedish and one Finnish. Both of the corporations were international to start with, but the merger necessitated analysis of leadership styles and modes of conflict solutions. The study included more than 30 000 participants in several European, Asian and North American countries. A self-administered questionnaire was used for the assessment of both explanatory and dependent variables (Oxenstierna et al 2003). Ways of solving problems/conflicts in the workplace were explored by means of one question. Three alternatives were given in relation to how problems/conflicts are usually solved: "By discussion", by "having the leaders decide" and "no solution". The three alternatives represent "democratic", "authoritarian" and "laissez-faire" solutions. There were some pronounced inter-country differences. According to the results, within this particular company it was for instance reportedly (among employees) much more common in Germany than in Sweden to solve problems by "having the leaders decide" whereas democratic solutions were more common in the Swedish work sites than in any other country in the corporation. For each country in this multinational company comparisons were made between employees who reported the three different conflict solutions respectively with regard to perceived "stress", self-reported health and self-reported sick leave. In each comparison the "democratic alternative" served as reference category. The "no solution" category is the worst category and the "authoritarian" one the next worst with regard to all outcomes - perceived stress, self-reported health and self-reported sick leave. This relatively uniform pattern points to the beneficial effects of democratic solutions although no of course causal inferences can be made on the basis of a cross-sectional study of this kind. However, the pronounced differences in conflict solution styles between the countries emphasise the potential difficulties that arise in large mergers.

276 - POSTTRAUMATIC STRESS DISORDER IN REFUGEES FROM IRAQ

Theorell T. National Institute for Psychosocial Medicine (IPM), Stockholm, Sweden

This study which has been performed in our institute in collaboration with the "Crisis and Trauma Centre" in Stockholm is on refugees from Iraq. Refugees with posttraumatic disorder (PTSD) have been compared with refugees without this disorder. The study had a longitudinal design which means that participants were followed on

four occasions during the year after they received permanent permit to stay in Sweden. It is often assumed that the traumatic experiences in the country of origin is the main source of problem. The study (Sondergaard and Theorell 2003) has shown, however, that negative life changes in the new country, particularly events associated with the relationships to close relatives and friends (mostly of administrative nature, such as close family member not receiving permit to stay in Sweden) could have marked effects both on self-reported mental health and on endocrine states, particularly with regard to cortisol and thyroid hormones. In addition there were strong statistical interaction effects between PTSD and negative life events. One of the most pronounced effects of PTSD was on performance in the compulsory school for the immigrants' learning of Swedish. Those with PTSD had more difficulties related to the school situation (Sondergaard et al in press). Ongoing studies of cognitive function and brain morphology in our group show that the PTSD patients have marked cognitive difficulties than the non-PTSD group of refugees from Iraq. According to preliminary results the morphological brain changes are more pronounced in the group with the most pronounced short memory changes in the PTSD group. This group of findings indicate that the host country should be sensitive to the fact that PTSD could have pronounced effects on refugees' adaptation process.

80 - EMOTIONAL (NON)EXPRESSION AND HEALTH: A SELECTIVE REVIEW OF EMPIRICAL FINDINGS

Vingerhoets A. Tilburg University, Tilburg, The Netherlands

In popular lay beliefs and folk psychology, it is common knowledge that the expression of emotions, including crying, is healthy. In contrast, repression and inhibition of emotions are believed to have negative effects on one's physiological functioning, resulting in increased risk of diseases. The behavioral sciences have investigated this issue from two broad approaches. First, there are ample correlational studies focussing on the relationship between a wide variety of personality features, in which (non) expression is a main component, and health. Examples are alexithymia, repression, Type C and Type D. Second, there is evidence from experimental work on the effects of inhibition of emotions on physiological processes and on the effects of writing about emotional events on physical and mental well-being. In this presentation, I will provide an overview of recent developments in this area. Special attention will be devoted to methodological and assessment issues.

89 - GENE-ENVIRONMENT INTERACTIONS: IMPLICATIONS FOR PSYCHOSOMATIC MEDICINE

Williams RB. Duke University Medical Center, Durham, NC, USA

Twin studies show that psychosocial risk factors like hostility and depression, as well as intervening biobehavioral mechanisms like cardiovascular reactivity to stress, are significantly influenced by genetic factors. With the completion of the Human Genome Project, it is now possible for the first time to begin the process of using the tools of molecular genetics to identify variants in specific genes that are responsible for such "genetic influences." In this talk I shall illustrate how this process is beginning to unfold by describing research showing that polymorphisms of two genes involved in the regulation of serotonergic function – the genes encoding the serotonin transporter (5HTTLPR) and monoamine oxidase A (MAOA-uVNTR) – interact both acutely and over longer time periods with stressful environments to influence the expression of psychosocial risk factors and biobehavioral mechanisms. For example, the 5HTTLPR long allele is associated with increased cardiovascular reactivity to stress in lab studies and with increased risk of myocardial infarction in epidemiological studies, but the 5HTTLPR short allele is associated with increased risk of major depression, but only in persons experiencing many stressful life events. To understand how one's genes contribute to the development of complexly caused diseases like coronary heart disease or cancer, we will need to learn how multiple genes interact epistatically with each other and with particular environmental factors to influence the expression of endophenotypes that make up the predisease pathways. Ultimately, the knowledge gained from this research will enable us to identify highly susceptible individuals who can be targeted for primary and secondary prevention measures.

183 - THE PERSPECTIVES OF SOMATIZATION

Wise TN. Johns Hopkins School of Medicine and Inova Fairfax Hospital, Falls Church, USA

Somatization may best be defined as a somatic idiom of psychosocial distress. It is common in primary care settings and often missed. This leads to overuse of medical tests, procedures, and health care facilities. It also may reinforce the somatizing patient's belief that he/she is physically ill. There are various ways of conceptualizing somatization. First the disease model depends upon syndromic clarification and reliable categorization. The DSM and ICD iterations suggest that the somatoform disorders are disjunctive but in fact may not be as separate as needed to allow a heuristic nomenclature. To further complicate the issue, few psychiatrists see the full somatization disordered patient who will rarely seek mental health care. Thus the diagnostic development of somatoform disorders that are both reliable and valid needs rethinking. The next perspective is that of the life story which allows the empathic physician to make meaningful connections with important life events in the patient's life that might illuminate current issues. The third perspective is that of dimensions which allows the power of quantification. Various inventories measure somatic concerns and are of some help. Finally the view of behaviors, a goal seeking activity to reduce anxiety, propels individuals to health care providers. Such behaviors often need to be modified but demands careful sequential analysis to document the chain of events that led to the activity. Each of these perspectives is useful in understanding somatization and managing patients with such problems.

184 - WORKSHOP: THE CHALLENGE OF EDITING A MEDICAL JOURNAL

Wise TN. Editor in Chief Psychosomatics. Johns Hopkins School of Medicine and Inova Fairfax Hospital, Falls Church, USA

Editing a medical journal has great joys and multiple stresses. The former greatly outweighs the latter. This presentation will review the issues from an Editor's vantagepoint about the role of a journal, considerations of potential authors, and the issue of citations in gauging a journal's success. Psychosomatics will be the journal from which examples will be utilized.

335 - LONGTERM-EFFECTS OF ADVERSE CHILDHOOD EXPERIENCES ON HEALTH

Egle UT. Department of Psychosomatics and Psychotherapy, University Medical School, Mainz, Germany

The stability of a child's early life has profound effects on physical and mental health. Unstable parent-child relationships as well as physical and sexual abuse, but also early biological stress can lead to behavioral disorders and increased morbidity and even mortality from a wide variety of common diseases later in adulthood. In the last few years research findings have accumulated on those emotional, behavioural and psychobiological factors which are responsible for the mediation of these lifelong consequences. Increased CRH release plays a central psychobiological role for the heightened stress vulnerability. This release triggers a cascade of biological processes through the activation of the HPA- and the LC-NE-axis which, within the framework of feedback mechanisms leads to damage in the hippocampus and prefrontal cortex and finally to a life-long dysfunction of the stress response system as well as anxiety and depression. On the behavioral level, emotional and cognitive impairment emerge as a consequence of early stressors. The available defense mechanisms are immature (turning against self, projection). Because they are limited in the range and flexibility of their reactions, traumatized children and adolescents often act out their affects. High-risk behaviours (e.g. drug abuse, addiction, smoking, disturbed eating behavior, suicide attempts) often are insufficient attempts to compensate for increased stress vulnerability and immature defense mechanisms. These behaviors predispose for physical disease (cardiovascular, disorders, stroke, viral hepatitis, type-2-diabetes, COPD) as well as for personality disorders. Cluster A and B personality disorders and symptoms of a paranoid, narcissistic and passive-aggressive personality bring along an increased likelihood of violence and delinquency. Up-to-now only few studies investigated the compensatory function of protective factors, e.g. temperament, intelligence, gender, secure attachment, emotional stable relationship with at least one parent or later partner and sense of coherence. A recently published study on the polymorphism of the 5HTT gene demonstrated a protection of 1/1 homozygote individuals for the

longterm effects of severe child maltreatment for depression. A bio-psycho-social model of vulnerability is outlined which integrates the biological and psychosocial factors with regard to longterm health effects in adulthood. It demonstrates that the discipline-related distinction between nature and nurture is based on an antiquated scientific understanding. The bio-psycho-social interactions outlined offer the opportunity to develop approaches of psychosomatic prevention

333 - THE CHARACTERISTICS OF PSYCHOTHERAPY AND PSYCHOSOMATICS Fava GA, Mangelli L, Ruini C. Department of Psychology, University of Psychology, Bologna, Italy.

Psychotherapy and Psychosomatics is an European peer-reviewed journal that is about 50 years old and publishes papers on psychotherapy and psychosomatic medicine. Its 2002 impact factor was 3.19, which places it in the top 10 psychological journals and in the top 20 psychiatric journals in the SCI rankings. In the past few years, Psychotherapy and Psychosomatics has published papers concerned with a wide range of topics, such as psychotherapy research (particularly controlled trials), psychosomatic medicine, psychoneuroendocrinology, psychopharmacology and conflict of interest. They were reviews, editorials, regular articles and clinical notes. It has gained a considerable reputation of independence, by launching debates on issues such as the potential risks of antidepressant drugs, the dangers of conflict of interest, national trends of research versus investments and psychological assessment. Indeed, it seeks papers characterized by unconventional thinking, strong clinical orientation and rigorous methodology.

334 - COMPLEMENTARY MEDICINE AND ORTHODOX MEDICINE: WHAT ARE THE DIFFERENCES IN CLINICAL PRACTICE AND THE VIEW OF CONSUMERS Furnham A. Department of Psychology, University College London, United Kingdom

This paper has four sections to it. It starts by trying to compare and contrast Complementary and Orthodox Medicine (CM and OM) to see how and where they differ in philosophy and practice. The next section looks at speculations as to why there has been a world wide growth in the interest in, and use of CM, particularly in Europe and America. The third section explores possible differences between OM and CM consultations and everyday practice that may influence patient preference and satisfaction. The final and longest section of the paper describes the results of 8 studies all aimed at answering the central question as to who, when and why patients choose CM over OM. The modern patient shops for health: they are just as likely to be "pushed away" from OM as "pulled toward" CM. Further it is very likely that many CM processes can be explained by the placebo effect.

332 - GENERAL HOSPITAL PSYCHIATRY Lipsitt DR. Harvard Medical School, Brookline, USA

General Hospital Psychiatry: Psychiatry, Medicine and Primary Care is completing its 25th year of publication as a bimonthly peer-reviewed professional journal. The Journal provides a forum for communication among professionals with clinical, academic, and research interests in the interfaces of psychiatry and the mainstream of medicine in whatever settings it appears. All aspects of consultation-liaison psychiatry, psychosomatics, in- and outpatient care and community programs are included in its scope. The Journal has been a leader in the field of primary care/psychiatry interfaces and has published the highly acclaimed Strain C-L and psychopharmacology databases valued by researchers and writers. Medical Psychiatric Rounds are of great interest to students and doctors-in-training. Special Sections include Law, Ethics and Psychiatry; Emergency Psychiatry; Commentary and Perspective; Women's Health, as well as Book Reviews, Brief Communications and Letters. The editorial board includes Don R. Lipsitt as Editor-in-Chief, Wayne Katon as Deputy Editor, and an outstanding international board of researchers and clinicians in psychosomatic medicine and primary care psychiatry. Time from acceptance to publication is approximately 4-6 months. The Journal is published by Elsevier Science.

337 - THE AMERICAN VIEW ABOUT THE GERMAN DEVELOPMENT IN PSYCHOSOMATIC MEDICINE Strain JJ. Mount Sinai Medical Center, New York, USA

Introduction: Consultation versus liaison psychiatry in the USA. Principles of Liaison Psychiatry. BACKGROUND: Historical antecedent: psychosomatic medicine movement; movement of psychiatric patients from outlying psychiatric hospitals to acute care general hospital units; consultation psychiatry for referred patients - Numerator; Liaison psychiatry joining the medical unit - denominator. Consultation versus liaison psychiatry. C-L interventions in the medical setting: Consultations, nurse, doctor, ward, team patient centered conferences. Use of psychiatric talking and pharmacotherapy interventions. Family meetings, and community based interventions. Intervention outcomes: Less psychiatric morbidity at discharge; shorter hospital stays; fewer rehospitalizations; less family expense post patient discharge. Fewer medical expenses in the outpatient setting. Models of mental health training for primary care physicians, internists, surgeons, ob-gyn, and other physicians: consultation; liaison; bridge; hybrid; post-graduate training; and dual trained, e.g., internist and psychiatrist in same physician. Engel's dual trained post graduate model often requires several years. NOT necessarily psychoanalytic training. Unitary concept of offering both talking and medication treatment. Comparison of us c-l psychiatry and german psychosomatic strategies and tactics will be presented. Important concept of numerator and denominator populations; diagnostic differences; use of hospital setting for therapeutic interventions.

338 - PSYCHOTHERAPY OR PSYCHOPHARMACOTHERAPY IN DEPRESSIVE DISORDERS AND SOMATIZATION Strain JJ. Mount Sinai Medical Center, New York, USA

Introduction: The need for diagnostic specificity to enable appropriate psychiatric treatment: talking or drugs. Treatment is based on the specific diagnosis achieved; diagnostic certainty is the most important key to therapy. Depressive disorders: There are five genre of depressive disorders all of which have different approaches for treatment: 1) Major affective disorders - psychopharmacotherapy, and at times accompanied by psychotherapy; 2) dysthymia - usually psychotherapy (no random controlled trials of antidepressant medications); 3) minor depressive disorders - psychotherapy/and/or psychopharmacotherapy; 4) organic affective disorders - atypical antipsychotics, treatment of underlying somatic pathology contributing to CNS dysfunction; 5) adjustment disorders - counseling, psychotherapy, rarely chemotherapy. Somatization disorders: Here again there are six disorders and the diagnosis effects the treatment selected. 1) Somatization disorder in random control trials has responded to cognitive behavioral therapy; 2) hypochondriasis has responded to talking therapy and an effective doctor-patient relationship; 3) conversion disorders respond to psychotherapy and psychodynamic interventions; 4) psychogenic pain disorders may respond to cognitive behavioral therapy as well as SSRI or TCA antidepressant medications; 5) body dysmorphic disorder has responded to CBT and to SSRI, although no random control trials in either modality have been shown to exceed the effects of placebo. 6) Somatization disorder not otherwise specified - further diagnostic assessment, psychotherapy, perhaps a trial of SSRIs. CONCLUSION: Diagnostic specificity is the first key to treatment with the depressive and the somatoform disorders. Depending upon the diagnosis psychotherapy or psychopharmacotherapy may be the treatment of choice.

Oral presentation

260 - QUALITY OF LIFE 10 YEARS AFTER HEART TRANSPLANTATION-STATUS OF 125 ADULT PATIENTS AND 25 ADOLESCENTS Albert W. Deutsches Herzzentrum Berlin, Germany

This study aimed to evaluate the quality of life (QoL) and psychosomatic status of 125 patients (25 women, 100 men) surviving 10 to 16 years (mean: 12.51 y) after heart transplantation (HTx). A group of 25 patients who were transplanted between age 4 and 17 currently alive 6 to 17 years (mean: 9.56 y) after HTx were assessed separately to compare long term-outcome. Adolescent patients are to be seen as a risk group due to specific developmental problems and frequent medical non-adherence. Assessment was done by semi-structured interview, self-rating instruments (WHOQOL-Bref, SF-36, GBB, HADS) for QoL and by clinical chart analysis. Outcome data of the adult sample were compared with those of a matched healthy control group of 100 persons. The somatic status of the HTx patients was characterized by good cardiac function: 93% had NYHA Class I-II and 78% a normal LVEF, but patients suffered from multiple medication side effects (tumors – especially of the skin, osteoporosis, polyneuropathic symptoms, renal complications). In the QoL questionnaire SF-36 adult transplanted patients scored significantly less well than controls in the scales: “physical functioning” ($p=.000$), “role-physical” ($p=.000$), “bodily pain” ($p=.000$), “general health” ($p=.000$) and “social functioning” ($p=.001$). In the emotional domains “vitality” and “role emotional” no significant differences could be found, but patients suffered from different mental problems such as persisting anxiety and depression. Adolescent patients showed a comparable performance in respect to their physical functioning and daily activities. In the psychological dimensions of the QoL the young patients reported no different data than the adults but scored to clearly lower than healthy young people. Overall, patients complained of multiple psychosomatic syndromes (GBB) e.g. exhaustion, diffuse cardiac misperceptions and abdominal pain. Anxiety and depression scores (HADS) were only slightly elevated but in interviews patients reported intense psychological distress surrounding transplantation-associated events, recurrent fears and phobias.

281 - MAJOR DEPRESSION AT THE GENERAL HOSPITAL: PREVALENCE, MULTIDISCIPLINARY ASSESSMENT AND CO-MORBIDITY Andreoli A, Dumont P, de Tonnac N, Borgacci S, Carbaillera Y, Rentsch D. Service d'accueil, urgences et liaison, Département de psychiatrie, Hôpitaux Universitaires de Genève, Suisse

Careful diagnosis and treatment innovation for medical patients referred to general hospital with major depression is a major mental health issue with significant relevance to contemporary liaison psychiatry. To better to respond these needs, a DSM IV-derived questionnaire was utilized from a well trained clinical psychologist in order to assess DSM IV diagnostic criteria for Major Depression in 250 consecutive subjects who had been admitted to a non psychiatric university service (Département de Médecine Interne, HUG, Geneva). Then, an attendant psychiatrist performed a reliable, blind assessment of each subject on presence and severity (HDRS) of this illness. First step of data analysis was to compute prevalence rates, second was to investigate the comparative diagnostic power of every day medical assessment, self report supported evaluation and psychiatric examination. Finally, we estimated the effect of presence and subtype of additional non psychiatric disorder, depression severity and psychiatric co-morbidity to the observed differences. The main results of this ongoing project will be reported and comment will be provided.

55 - MEDICALLY UNEXPLAINED PHYSICAL SYMPTOMS: THE FEASIBILITY OF GROUP CBT IN PRIMARY CARE Arnold IA. Department of General Practice, Leiden University Medical Center, Netherlands

To estimate the number of patients that could be eligible for group cognitive-behavioural treatment (CBT) for medically unexplained physical symptoms (MUPS) and to assess the acceptability. Methods: All consultations of one GP underwent initial screening for a period of three months. Patients who possibly had MUPS were classified by their GP. Identified patients were invited for a research interview and

offered treatment. Results: 1084 consultations of 796 patients were screened; 168 patients aged 25-79 possibly had MUPS. The GP classified the symptoms of 104 patients as medically unexplained. Regarding eligibility for CBT, 71 met exclusion criteria. The research interview was offered to 33 patients, 16 of them declined and 12 were eligible. Seven out of the 12 eligible patients accepted treatment. Conclusion: In the consulting population, 13% of all patients were aged 25-79 and had MUPS. For only a minority of these patients group CBT was suitable and acceptable.

251 - DISCLOSURE OF CONCERNS OF FIBROMYALGIA PATIENTS IN MEDICAL CONSULTATIONS: THE SIGNIFICANCE OF ALEXITH

Arnstein Finset, University of Oslo, Norway

Background and subjects: Research indicates that patients who express their concerns in a consultation may feel more satisfied and have less distress. We expected that patients with alexithymia (a stable trait characterised by a reduced ability to identify and verbalise emotions) would have problems in expressing emotionally charged concerns and that they would be vulnerable to frustration and distress after the consultation. We tested these expectations in a sample of 67 arranged consultations with fibromyalgia patients, half of them with alexithymia. Method: Alexithymia (as measured by TAS-20), anxiety levels (STAI – trait anxiety), emotional state before and after the consultation (POMS) and patient satisfaction after the consultation were assessed. The consultations were coded according to Roter's Interaction Analysis System (RIAS). The sample was divided into patients who had expressed few (M: 0.5; SD: 0.6) vs. many (M: 3.0; SD: 2.5) concerns based on median split. Results: There was a mean (SD) of 1,7 (2.2) concerns in each consultation. Patients with alexithymia presented significantly more concerns than patients without alexithymia, 2,3 (2.7) and 1,1 (1.2) respectively $p < .05$. We then analysed to which extent the expression of concerns and alexithymia status was related to patient satisfaction and changes in emotional state from pre- to post interview. Satisfaction: There was neither significant main effects of concern or alexithymia nor an interaction effect on satisfaction. Emotional state: There was again no main effect of concern on the dependent variable, but a significant concerns x alexithymia interaction effect ($p < .05$). Alexithymic patients who presented few concerns displayed increased post-consultation depressed mood. Discussion: The expectation that patients with alexithymia expressed fewer concerns was not confirmed. On the contrary, alexithymic patients expressed significantly more concerns than patients without alexithymia. Moreover, we found that alexithymic patients who did not express concerns in the interview tended to become more depressed after the interview, confirming the vulnerability of alexithymic patients of not resolving emotional concerns in medical interviews. Implications for communication skills training are discussed.

223 - ATTACHMENT STYLE AND GLYCEMIC CONTROL IN TYPE 1 DIABETES MELLITUS Attale C,

Guedeney N, Sola A, Slama G, Dantchev N, Consoli SM. Department of C-L Psychiatry, Georges Pompidou European Hospital Paris, France

Background: A recent research area in adult attachment concerns the application of attachment theory to the field of somatic diseases. Thus, health behaviours seem to depend on individual's attachment style. Objective: To study in type 1 diabetic patients the links between glyceemic control and attachment style, according to Bartholomew's model. Methods Clinical and biological characteristics of 100 type 1 diabetics (42 males, 58 females; mean age 38.1 ± 8.1) were collected. The quality of glyceemic control was defined as of the average of all the glycosylated hemoglobin levels (HbA1c) during the last year. Attachment style was assessed via two self-administered questionnaires: the Relationship Questionnaire (RQ) and the Relationship Scale Questionnaire (RSQ). Depressive symptoms were assessed via the CES-D. It was hypothesised that diabetic patients with an insecure attachment style would have higher HbA1c levels than patients with a secure attachment style. Results differ according to the self-report instrument used and to the level of attachment style analysis (attachment category or prototype-continuous attachment measures). Prototypical RQ and RSQ attachment scores were intercorrelated each other (Pearson r from 0.22 to 0.48). Using the RSQ in a categorical way, HbA1c levels significantly differed from one category to another (ANOVA $p=0.003$), preoccupied or fearful diabetic patients exhibiting

higher levels than secure or dismissing categories. Using prototypical attachment variables, a positive correlation was found between fearful attachment style and HbA1c ($r=0.25$; $p=0.02$). Using prototypical RQ scores, preoccupied or fearful attachment styles were positively associated with HbA1c (respectively $r=0.31$ and $r=0.20$). HbA1c was higher in patients with complicated diabetes. After controlling for the presence of at least one complication due to diabetes, a significant correlation persisted between RQ preoccupied attachment style and HbA1c ($p=0.005$), and a statistical trend was found for RQ dismissing attachment style ($p=0.056$). Conclusion Insecure attachment styles are more or less associated with increased HbA1c levels. These results should be taken into account for adjusting the patient-doctor relationship in order to improve glycemic control.

273 - A STRUCTURED INTERVIEW FOR ASSESSING

ALEXITHYMIA Bagby RM. University of Toronto/Ctr. for Addiction and Mental Health Toronto, Canada

Over the past three years the authors of the self-report Toronto Alexithymia Scale (TAS-20, the most widely used instrument for measuring the alexithymia construct) have been developing a structured interview for alexithymia -- the Toronto Structured Interview for Alexithymia (TSIA; Bagby, Taylor, & Parker, 2004). The instrument is composed of 32 questions distributed across four scales: (1) Difficulty Identifying Feelings; (2) Difficulty Describing Feelings; (3) Externally Oriented Thinking; and (4) Reduced Imaginal Activity. There are eight questions on each scale. Preliminary evidence from patient ($n = 88$) and community samples ($n = 134$) with respect to validity (face, content, concurrent, predictive and factorial) and reliability (internal, retest and inter-rater) indicate adequate to excellent validity and reliability. Preliminary normative data and cut scores are provided and recommendations for the use of this instrument with the TAS-20 for research and clinical purposes will be discussed.

317 - THE DEVELOPMENT AND SIGNIFICANCE OF

TYPE C Bahnson CB. John-Rittmeister-Institut, Kiel, Germany

Following the psychosomatic spring of the mid- and late 1900, for psychosomatic cancer research the freezing winter again has set in. The psychosomatic dimension in the development of cancer again is controversial, not to say rejected. This must be understood in the context, that the basic psychosomatic approach to physical illness, opened up by Freud, Felix Deutsch, and Alexander has been left behind. Instead a "naïve realism" in the form of physiologic reductionism has taken hold, perhaps also due to the significant technical advances. However, also this period will pass! Psychologic aspects of the cancer process (Pattern C) emerged in research in the fifties and sixties, and focused at first on antecedents to malignant illness, in a similar manner as "Pattern A" was found to be related to MI and hypertension. Biographic variables both on the sociologic and psychologic levels predicted a higher probability of malignant disease. Early loss of object, depression (much) prior to onset, repression of (and therefore unawareness of) unpleasant affect, especially hostility, and social conformity were found in several cross-sectional and prospective studies. As the prognostic variables came into focus, the relation between difficulties with experiencing and expressing emotions and affects and a poorer or better prognosis again emerged. Although the "Quality of Life" has captured the interest, and is more conform to the world picture of reductionists, the hope remains that the dynamic, or life history aspects of the illness of cancer patients may still be considered in their treatment as interacting variables in their responses. In the psychotherapy of cancer patients the beneficial effects of a gradual lifting of repression becomes obvious for both the oncologist and the patient. This fact may help revive the psychodynamic approach to cancer treatment. Research data on the relevant dimensions will be reviewed.

36 - EFFECTS OF A VIBROACOUSTIC BED ON PHYSIOLOGICAL AND PSYCHOLOGICAL

PARAMETERS Baule G, Groß K, Hüther G, Hermann-Lingen C. Department of Psychiatry, University of Göttingen, Germany

The positive effects of music on healthy proband's physiological and psychological states are well investigated. The aim of the study was to find out about possible differences between the effects of

music- (MS) and vibroacoustic-stimulation (VS) on physiological and psychological parameters in healthy people. Vibroacoustic exposition is based on the combined effects of music and low frequency sound vibration. Six men and ten women were counterbalanced to the conditions on a vibroacoustic bed. A Task-Force-Monitor registered the vagal and sympathetic tone, systolic and diastolic blood pressure, heart rate and total peripheral resistance. This equipment calculated the vagal tone from heart rate variability and the sympathetic tone from variability of the diastolic blood pressure. A person's subjective well-being was measured by an adjective checklist (EWL-K). The concentration of the stress-indicating hormone cortisol was measured from saliva samples. The following analysis was carried out separately for both genders. The results showed that the vagal and sympathetic tone remained stable during VS. The vagal tone prevailed, which indicated a relaxed state. In comparison with before exposition, both genders showed a decreased vagal level during MS (men: -9%, women: -10% $p = n.s.$). MS induced in men an ca. 16% ($p < .06$) higher, in women a 2% ($p = n.s.$) lower sympathetic tone in comparison with baseline. Men reacted to MS by an increased autonomic activation which might indicate an aroused state. Vagal activity still dominated in women. There was no influence on systolic and diastolic blood pressure or total peripheral resistance. Heart rate increased significantly during MS in both genders in comparison with VS ($p < .02$). Cortisol decreased significantly after both expositions ($p < .001$) so each one had a stress-reducing effect. Parts of the EWL-K were significantly influenced by VS and MS. VS in comparison with MS caused significantly higher.

199 - ASSOCIATION OF PSYCHODIAGNOSTIC PARAMETERS WITH PAIN PERCEPTION OF INTRACARDIAC SHOCK DISCHARGES - AN ANALYSIS OF 77 PATIENTS WITH AN IMPLANTED

CARDIOVERTER DEFIBRILLATOR Baumert J, Schmitt C, Ladwig K-H. Institut und Poliklinik für Psychosomatische Medizin, Psychotherapie und Med. Psychologie des Klinikums Rechts der Isar der Technischen Universität München and National Research Center for Environment and Health (GSF) and Institute of Epidemiology and Deutsches Herzzentrum München, Klinik an der Technischen Universität München, Germany

Background: Pain caused by intracardiac shock discharges is an important clinical issue in the treatment of patients with implanted cardioverter defibrillator (ICD). The aim of the present study was to examine whether the perception of these pains are influenced by various psychodiagnostic parameters. Methods: A total of 77 patients (69 men, median age 60 years) drawn from the outpatient clinic of the German Heart Center Munich with perceived shock experiences were included in the present analysis. Pain perception was measured by a scale ranged from 0 to 100% and dichotomized with the upper tertile as cut-off point. Multivariate logistic regression analysis was used to assess the effect of psychodiagnostic parameters on pain perception of the last intracardiac shock discharge. Results: The mean pain perception was 58.3% (SD 27.1%). No significant association was found to sex, age, cardiac diagnosis or number of previous shocks. Patients living alone or with an ICD therapy starting less than one year had a significant increased risk to suffer pain by the last shock. Adjusted for life situation and time since ICD implantation by logistic regression analysis, depressive symptoms (HAD-S), anxiety (SCL-90), limitations in daily life, feelings of helplessness and PTSD (assessed by IES) were significantly related to a higher level of pain perception. Conclusions: Pain perceptions of shock discharges are correlated with depressive and anxious symptoms.

324 - ATTACHMENT REPRESENTATION AND THERAPEUTIC INTERVENTION IN EATING

DISORDERS Becker-Stoll F, Ludwig Maximilian Universität München, Germany

The aim of the study was to investigate if attachment representation of eating disordered patients at the beginning of a four month day hospital treatment is related to (1) alexithymia and to eating disordered symptoms at the beginning and the end of the treatment program and (2) whether attachment representation predicts short-term outcome in eating disordered patients. Attachment representation was assessed with the Adult Attachment Interview (Main & Goldwyn, 1994) at the beginning of a four month day treatment program. The Toronto

Alexithymia Scale (TAS) and the Eating Disorder Inventory (EDI) were given to 47 patients with Anorexia Nervosa (n=18), Bulimia Nervosa (n=25) and patients with eating disorders not otherwise specified (n=4) at the beginning and at the end of a four month treatment program. Comparison of pretreatment and posttreatment scores showed significant declines in the EDI as well as in the TAS. Patients with secure attachment representation showed lower EDI scores at the end of therapy compared to patients with insecure attachment representation. Besides, unresolved attachment representation was related to high scores for alexithymia. We conclude that eating disordered patients with secure attachment representation benefit most of the therapeutic treatment and that patients with unresolved representation might need psychological treatment, which encourages understanding and expression of emotion to attain symptomatic improvement.

90 - UNEMPLOYMENT AND PHYSICAL

COMPLAINTS IN YOUNG ADULTS Berth H, Förster P, Brähler E. Medizinische Psychologie, Universitätsklinikum C. G. Carus, Dresden, Forschungsstelle Sozialanalysen Leipzig, Universitaet Leipzig, Selbständige Abteilung fuer Medizinische Psychologie und Medizinische Soziologie, Leipzig, Germany

Background: Negative consequences of unemployment for the physical and mental health have been proven in many studies. Our study examined the connections between unemployment and physical complaints in young adults in a longitudinal perspective. Method: Data were collected in the "Saechsische Laengsschnittstudie" ("Saxonian longitudinal study") between 1991 and 2003. The study examined young adults (N=400) born in the former GDR now living in the eastern part of Germany. The mean age of the participants was 18.15 years in 1991 and 30.05 years in 2003. In each wave slightly more than 50 % were female. Psychological distress and physical complaints were assessed by different well known instruments (e. g. GBB, HADS, SCL-90). Some more questionnaires were recently developed by ourselves. Results: In 1996 nearly 50 % of the young adults had experiences with unemployment, in 2003 the proportion was more than 60 %. We found connections between the period of unemployment and the psychological distress as well as the physical complaints in several waves: Currently unemployed persons and persons who had been unemployed for a longer period are much more burdened. In this context there are no gender differences. The psychological distress of unemployed adults is more distinct than the physical complaints. The physical and psychological state of health in former waves correlates with the overall period of unemployment which was measured in 2003. The correlations concerning psychological distress are slightly higher than those concerning physical complaints. The burden of unemployment is significantly influenced by the self-efficacy of the young adults. Unemployed persons with low self efficacy suffer much more than people with high self-efficacy. Self-efficacy is especially important for the experience of physical complaints. Conclusion: Even young and well educated adults are suffering under severe psychological and physical complaints of unemployment. In this sample psychological burdens are more important than body symptoms. The study implicates that even young unemployed people need special psychological support to prevent long term consequences like psychosomatic problems.

202 - CEREBRAL ACTIVATION BY LINGUISTIC THREAT IN PANIC PATIENTS – RESULTS FROM AN FMRI STUDY

Beutel ME, Dietrich S, Silbersweig DA, Stern E, Vaitl D, Stark R. Clinic for Psychosomatics and Psychotherapy, Giessen, Germany

Recent studies demonstrated comparable metabolic change following successful psychotherapeutic or pharmacological treatment of obsessive compulsive disorder, social phobia and major depression. Functional MRI opens new possibilities for probing the neural circuitry in specific disorders and for assessing changes following psychotherapeutic treatment. In a controlled prospective study patients were scanned by fMRI before and after 4 weeks of inpatient psychotherapy in an emotional go-no-go design. Controls were also scanned twice with a 4-week interval. Based on graphic presentation features, participants were instructed to press a button for certain words, but not for others. Based on extensive pre-testing threat words were specifically selected focusing major concerns of panic patients. These were carefully matched linguistically to neutral and positive

words. Behavioural and activation results are presented for ten patients and 20 controls at the first scan. According to our hypotheses, we found increased reaction times in patients compared to controls for threatening vs. neutral or positive words. Also, patients selectively showed a better recognition of threat-words following the scan, and worse recognition for neutral and positive words than controls. fMRI data showed stronger emotional activations (e.g. parahippocampus, medial prefrontal cortex) in patients for threat-words. Compared to controls, patients consistently showed stronger prefrontal brain activations under go- than under no-go-conditions. Results are consistent with a hypervigilance of panic patients to threat-words, both behaviourally and in their brain activation patterns. Patients' increased activation under go-conditions (compared to controls) could be a consequence of the lack of a cognitive demand inhibiting the emotional response (compared to no-go). Implications are discussed for using fMRI in psychotherapy studies.

219 - NEUROPSYCHOLOGICAL ASSESSMENT OF ATTENTION AND WORKING MEMORY IN PATIENTS WITH ACUTE WHIPLASH TRAUMA

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Attention and working memory were assessed in 104 acute whiplash patients within the first two weeks after the accident. Acute whiplash is defined as acceleration-deceleration mechanisms that are transferred to the neck and may cause lesions to neck muscles and ligaments, but without injury to the brain. The definition focuses largely on the biomechanical descriptions of the neck trauma and not on possible injuries to the brain or the psychological and social problems that may occur. Regardless of level of functioning, acute whiplash patients often report the same symptoms: Headache, neck pain, stiffness of neck, dizziness, fatigue, anxiety, problems of attention and memory, visual and auditory disturbances. It is still debated whether the subjective cognitive complaints are due to acute trauma, brain injury, psychological and social factors, and/or pain and discomfort. This study investigated attention, working memory, level of pain, headache, and fatigue after acute whiplash trauma. The study is part of a multicenter study on whiplash trauma. 126 consecutive acute whiplash patients were referred from Emergency Rooms to neuropsychological screening of attention and working memory. The inclusion criteria: 1) whiplash trauma after car accident to rear end, front end, or 45 degree side collision, 2) Quebec Grade I-III, 3) development of symptoms within 72 hours after the accident, 4) age 18-65. Exclusion criteria: 1) Conduction of first interview 10 days after accident, 2) CT scan showing signs of fracture or dislocation, 3) brain concussion, 4) paresis, 5) 6 months pre-accident average neck pain intensity: VAS >5, 6) chronic psychiatric and somatic illnesses, 7) alcohol and drug abuse, 8) unable to read and speak Danish. The neuropsychological study only included patients at high risk for developing Whiplash Associated Disorders based on results from earlier studies: 1) level of movement of neck, 2) level of pain intensity. Neuropsychological tests: WAIS-R (Digit Span Forward and Backwards, Arithmetic, Digit Span, Block Design), Controlled Word Association, Trail Making A & B, Short Category Test, and d2-Test. At the time of testing eleven-point box-scales assessed: General pain intensity, headache, neck pain, fatigue, anxiety, depression, stress, and beliefs about the effects of the condition now and in the future. Current medication was registered. Preliminary results show that 33-50% of patients score below norm cutoffs for healthy adults and 33% score in the moderate to severe head injury norm. The results cannot be explained by pain and discomfort.

342 - SUGGESTIVE AND HYPNOTIC TECHNIQUES IN GENERAL MEDICINE: A HISTORICAL APPROACH

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The use of suggestive and hypnotherapeutic techniques in General Medicine is described from its beginning in early mesmerism in the 18th century until its multifaceted application in modern hypnotherapy. Practical examples will illustrate the suggestive-hypnotic practice for various fields of application (pain management, obstetrics, oncology etc.). Historical as well as modern evaluations of these old therapeutic techniques will be presented.

292 - THE IMPACT OF PSYCHOBIOLOGICAL FACTORS IN INFLAMMATORY BOWEL DISEASE

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Introduction inflammatory bowel diseases consist mostly of ulcerative colitis (UC) and Crohn's disease (CD). The aetiology is unknown, however both mechanisms influencing immunological and endocrinological mechanisms seem to be essential. The general impression is that psychological distress may worsen IBD, at least in some patients, however, this group is not well characterised. Objective to study psychological factors and distress in IBD and to study whether stress management will improve outcome in IBD. Methods 120 patients with UC or CD endoscopically and histologically verified, age 18-60 with Simple index/activity index >5, stable on medication last 4 weeks with a distress level on the perceived stress questionnaire >60, without severe psychiatric disorders were randomised to a psychological intervention or treatment as usual. The psychological intervention consists of 3 group sessions with psychoeducation and stress management and then 6 individual sessions of cognitive behavioural therapy (CBT). Both groups were followed at 3, 6, 12 and 18 months. The intervention group had a booster of one CBT session at the 6 and 12 months follow up assessment. Results 82 patients are included so far, 27 have completed 12 months follow up and 40 patients have completed the study. Preliminary data from this randomised study will be presented at the meeting.

308 - CAREER DETERMINANTS OF YOUNG PHYSICIANS - RESULTS OF A LONGITUDINAL STUDY

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Aims and objectives: Up to date, prospective studies of physicians' career paths are lacking. Data of a longitudinal survey of a cohort of Swiss medical school graduates are presented, evaluated with regard to the contribution of individual, institutional and social determinants to career development. Methods: In 2001 (T1), 719 graduate students (52.9% females, 47.1% males) returned a questionnaire comprising components of personality traits, career motivation, and career planning[1]. In 2003 (T2), after 12 months of residency, 72% of the young physicians participated in the follow-up study, which investigated their work place experience and further career planning[2]. Results: At T1, female graduates scored higher on traits such as helpfulness, relationship consciousness, empathy, family responsibility, and job security. Male students scored higher on traits such as independence, decisiveness, self-confidence, activity, income, and prestige. Women were further advanced in the writing of their thesis ($p < .05$), chose different topics ($p < .001$), and had more often decided in which field they wished to specialize ($p < .05$). Women preferred fields with intensive patient contact ($p < .01$), men tended to specialize more in instrumentally oriented and high-technology medicine ($p < .001$). The regression model revealed that, apart from gender (being female), instrumentality and extrinsic career motivation predict advanced academic achievement, whereas self-esteem and intrinsic career motivation influence the specialty choice. Cross-sectional (T2) and longitudinal data (T1 @ T2): There are no gender-related differences in the following determinants: Physical and psychological well-being, satisfaction with life, and social support. Despite high professional stress, well-being and satisfaction with life were rated higher than during the final year of medical school. Gender-related differences can be seen in the following factors: Most young female physicians intend to have a private practice; their intrinsic career motivation decreases and their extraprofessional concerns increase over time. Most young male physicians wish to embark on a hospital and/or academic career; their intrinsic and extrinsic career motivation increases over time. Fewer women ($p < .001$) are career-oriented, and women consider part-time professional life and part-time employment and children significantly more often ($p < .001$). Conclusions: Women plan their career more purposefully than men, but fewer of them are career-oriented. Not only gender but also personality traits and career motivation play an important role in academic achievement and career planning. Key words: Medical students, young physicians, gender, personality traits, career motivation, academic achievement, career plans, specialty choice.

237 - THE LUNAR PHASES' INFLUENCE ON

BEHAVIOUR: STILL A MYTH? Bulbena A, Sperry L, Castaño J, Aceña R, García Ribera C. Psychiatry Department, Hospital del Mar, Barcelona, Spain

Objective: The influence of the moon on human and animal behaviour has been a common belief throughout the history of humankind that has shaped many myths and cultural traditions. Throughout the past years many researches have pursued gaining empirical data to assess whether the lunar phases do enhance psychiatric disturbance, despite increasing evidence that such association is not significant. This study assesses the moon's influence on behaviour further by analyzing psychiatric emergencies and animal bites according to the lunar phase. Design: Retrospective observational analysis of hospital admission records compared with lunar phase records during the period of time reviewed. Analysis of variance for independent groups was used throughout. Main outcome measures: Total number of emergencies (N=10704; 1999-2001) in a district psychiatric hospital, number of emergencies due to panic attacks (N=145; 2002) in a general hospital, and number of animal bites (N=1203; 1995-1998) collected at the Regional Register in a community hospital were analyzed and compared with the corresponding lunar phases. Results: No significant differences were found for psychiatric emergencies ($F=1.5$; $p=0.2$), panic attacks ($F=1.15$; $p=0.28$) or animal bites ($F=1.3$; $p=0.2$) comparing with days of full moon and all other lunar phases. Conclusion: Psychiatric disturbance and animal bites do not seem to be more frequent on full moons than at any other lunar phase. However, a positive trend was appreciated in panic episodes in females during full moon ($F=2.3$; $p=0.13$) despite not reaching statistical significance. Regardless of folkloric belief and some positive results in previous studies, the myth seems to remain a myth.

269 - MOOD DISORDERS, SHYNESS, AND SOCIAL ANXIETY IN WOMEN WITH TURNER SYNDROME

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Abnormalities in quality of life and cognitive measures have been observed in women with Turner syndrome (TS), and a relationship between these phenomena and chromosomal constitution has been suggested. In contrast few studies have systematically evaluated the presence of mood and behavioral symptoms or syndromes in these women. Methods: We administered a battery of psychiatric measures to women with TS ($n = 100$). All women received structured psychiatric interviews, the Structured Clinical Interviews for DSM IV (SCID I and II), and completed the following standardized rating scales: Revised Shyness Scale, Social Anxiety Scale, Rosenberg's Self Esteem Scale, the Center for Epidemiology and Statistics Depression Scale (CES-D) and Hamilton Depression Rating Scale (Ham-D). All women were interviewed after a two-week period during which their hormone replacement had been discontinued. Comparison groups included asymptomatic controls ($n = 35$) and women with premature ovarian failure (POF) ($n = 100$). Data were analyzed with ANOVA and post hoc Bonferroni t-tests. Results: Eighteen women with TS met criteria for a current Axis I psychiatric disorder, forty-two for a past Axis I disorder, and five for an Axis II disorder. Forty-seven of the TS women met criteria for a current or a past Depressive or Anxiety disorder. Women with TS reported a higher rate of lifetime depression compared with rates observed in community-based studies but similar to those obtained from gynecologic clinic samples. Shyness, Social Anxiety, Self Esteem, CES-D and Ham-D scale scores were significantly higher (more symptomatic) in women with TS compared with asymptomatic controls. However, women with TS were not distinguished from those with POF by any of these measures. TS women with higher shyness scores were significantly older ($p < 0.05$) and shorter ($p < 0.01$) when compared with the low shyness TS group. None of the remaining measures (including paternal origin of X-chromosome) distinguished TS women with high and low shyness scores. Conclusions: Women with TS have an increased rate of episodes of depression relative to community samples but not to gynecologic clinic samples. Shyness may be a distinct phenotypic expression of the influence of abnormal X-chromosome "dosage" on brain development in TS. However, similar levels of shyness observed in women with TS and those with POF suggest that declining

reproductive function and infertility may be the more proximate source of inhibited social behavior.

210 - PSYCHOTHERAPEUTIC TREATMENT OF TRAUMATISED REFUGEES WITH PTSD DISORDERS: A RANDOMISED CONTROLLED TRIAL

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Several studies have shown that extreme traumatised refugees from war area report a high number symptoms of PTSD. In addition they even suffer from daily exile-related stressors. Therefore, psychotherapeutic treatment is a extremely difficult task in this area. The aim of the present study was to examine the effects of a time-limited, trauma-specific short-term psychotherapeutic intervention in the initial stabilization phase of treatment with PTSD in massively traumatized refugees. 70 refugees from Ex-Yugoslavia with PTSD were randomized to either psychotherapy treatment or waiting list. The patients were treated individually for 25 sessions. Main outcome variables were post-traumatic symptoms (Harvard Trauma Questionnaire HTQ), psychological distress (SCL-90-R) and neurohumoral parameters (cortisol). These measures were assessed before and after treatment. At the end of the therapy the intervention group had improved significantly with regard to post-traumatic stress symptoms and psychological distress. In contrast, we did not find an improvement for the control group. The results of the study suggest that a structured, trauma-specific short-term psychotherapy in the initial stabilization phase of treatment decreases post-traumatic symptoms and psychological distress in highly traumatized refugees.

216 - EMOTIONAL AWARENESS AND SOCIAL ANXIETY IN OBESE PATIENTS WAITING FOR A GASTRIC BANDING SURGERY

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Objective: To describe the relationship between psychosocial and somatic characteristics in morbid obese patients candidates to a gastric banding surgery. **METHODS:** The data were collected via several self-administered questionnaires, assessing quality of life (MOS-SF 36), alexithymia (TAS 20), the level of emotional awareness (LEAS), depressive mood (BDI) and social anxiety (SIB). A psychological interview completed the self-report data. Population consisted of 16 men and 83 women (mean age 36.6 ± 11.1). Mean body mass index (BMI) was 46.1 ± 6.3 . **RESULTS:** 65 % of patients reported grazing, 71 % overeating and only 7 % bulimic behaviour. SF 36 scores were significantly impaired in comparison with data in general population. Only 25 % of the subject could be considered as alexithymic. LEAS scores were lower than those available in general population. Sixteen percent of the subjects presented current depression. None of the emotional scores was correlated with BMI. Scores of social anxiety as measured by SIB were higher than those available in a general population, as well as in social phobic individuals. Contrary to data published in phobic patients, our obese subjects did not show any difficulty in assertiveness. Social anxiety was positively correlated with LEAS ($r = 0.28$; $p < 0.01$). Interestingly, the correlation between two scores of SIB questionnaire (the social anxiety and the assertiveness scores) was positive in our population ($r = 0.42$; $p < 0.001$) whereas it was shown to be negative in a social phobic population ($r = -0.53$). **CONCLUSION:** Morbid obese patients seeking gastric banding surgery present with an impaired quality of life and level of emotional awareness and with high levels of social anxiety without any significant alteration of assertiveness, suggesting the impact of social stigmatisation. A low level of emotional awareness could protect these subjects from social anxiety, allowing them to preserve a more satisfactory emotional balance.

227 - ASSOCIATION BETWEEN PHYSICIANS' PERCEPTION OF HYPERTENSIVE DISEASE AND ACTUAL BLOOD PRESSURE CONTROL

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Objectives: To investigate the perception of hypertensive disease (HTD) in hypertensive patients (HTp) and their physicians and to

create a typology of physicians, as regards their own perception of hypertension and HTp, then to explore the links between the physician's type and BP control. **Methods:** DUO-HTA was a French national, observational, cross-sectional survey on a representative sample of 347 general practitioners (GP) and 210 cardiologists and a population of 2,022 HTp followed-up by these same practitioners. Data were collected using two "mirror" self-administered questionnaires filled out by HTp and their physicians. HTp were then classified as either controlled or non-controlled depending on whether their BP figures were < 90 mmHg for diastolic BP and 140 for systolic BP. A cluster analysis was performed using the physicians' responses to 13 main questions regarding their perception of HTD and HTp in general, after conducting a correspondence factorial analysis in the intermediate step. **Results:** Five groups of physicians were classifiable and labeled as "motivated," "indulgent," "neutral," "paternalistic," and "unmotivated", based on their characteristics, and represented 12 %, 14 %, 29 %, 22 % and 23 %, respectively of the population of physicians studied. The percentage of GPs was higher among the "motivated" and "unmotivated" physicians. The "motivated" physicians were characterized by a positive view of the clinical presentation of HTD, HTp, the impact of the disease on the lifestyle and lastly, the patient-physician relationship: they enrolled the greatest number of "controlled" HTp in the study. Such a significant relationship between physician's group and BP control of patients enrolled in the survey persisted in multiple logistic regression analysis after adjusting for all the sociodemographic, clinical and psychological patient-related variables accounting for BP control in univariate analyses ($OR = 1.55$; $p = 0.002$). **Conclusion:** The DUO-HTA survey emphasizes the bearing of the physician's overall perception of HTD and of an interactive, open, and empathetic relationship on the chances for successfully controlling BP. It encourages the development of physician awareness plans focused on improving patient-physician relationships.

298 - EATING DISORDERS AND OBESITY - NEW PERSPECTIVES FOR RESEARCH AND CLINICAL PRACTICE

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Both mental and biological aspects are important in the etiology of eating disorders and obesity. Beside of Anorexia and Bulimia nervosa Binge Eating Disorder (BED) as a new eating disorder entity has been increasingly studied in the last decade. The aim of the symposium is to present new research results with regard both to therapeutical and etiological factors of obesity and eating disorders. Two different study groups (de Zwaan et al. and Zipfel et al.) present new treatment programs for obese patients with BED both based on short-term cognitive behavioral treatment, however with different results. While de Zwaan et al. could not observe positive treatment effects especially with regard to the eating disorder symptomatology Zipfel et al. demonstrate at least promising short-term results. Herpertz et al. present a multicenter controlled study on the psychiatric comorbidity of obese subjects with and without request at weight loss treatment and in normalweight subjects. They demonstrate that obese subjects suffer considerably more from psychiatric comorbidity compared to normalweight individuals. However no clinical important difference could be observed between obese subjects seeking and not seeking weight loss treatment. Finally Friederich et al. present neural correlates of anorexia and bulimia nervosa presenting images of food, female bodies and aversive emotional scenes while brain activity was being recorded by fMRI. A ventromedial prefrontal response to food stimuli and a dimensional activation of the medial apical prefrontal cortex in correlation with the subjective unpleasantness of the body-image stimuli were identified as features of eating disorder, proposing that an abnormal propensity to activate medial prefrontal circuits in response to inappropriate stimuli is common to eating disorders.

56 - THE SPECIFICITY OF REPORTED PHYSICAL SYMPTOMS FOR ANXIETY AND DEPRESSION IN GENERAL PRACTICE.

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Background. Depressive and anxious patients report more physical symptoms than patients without depression or anxiety. One hypothesis is that these patients experience specific physical symptoms. This makes sense since mental disorders have specific physiological aspects, which are part of the definition. However, in the diagnostic process the sensitivity of presented physical symptoms for the diagnosis of depression is not very high. The number of physical symptoms rather than the specific type of symptom is found to be predictive for psychiatric disorders or psychological distress. In this paper we address the question whether specific physical symptoms are reported in the presence of distress, taking into account the presence of somatic disease. **Methods:** Cross-sectional data were collected of 1458 participants of the SOUL-study, from eight university affiliated general practices in The Netherlands. Electronic patient records of the GP provided information on the presence of somatic disease. Questionnaires included the Hospital Anxiety and Depression Scale and the Physical Symptom Checklist. Odds ratios were calculated: they can be interpreted as the chance that a specific symptom is reported when distress is present, compared to the chance when distress is not present. For women odds ratios were also calculated in a multivariate model, taking into account the presence of somatic disease. **Results:** In both men and women the presence of distress had a major effect on the reporting of all types of physical symptoms. Most odds ratios were significantly higher than one: implicating that patients reporting distress reported all types of physical symptoms more often than patients without distress. Analyses in women in which we corrected (multivariate) for the presence of somatic disease did not substantially change the univariate pattern. Odds ratios were particularly high (>10) for feeling tired or having low energy, fatigue without exertion and forgetfulness. **Conclusions:** It was the level of distress rather than patient characteristics such as gender or somatic disease that accounted for the reporting of any physical symptom. We found no specific distress-related physical symptoms. This held true for both patients with and without somatic disease.

112 - SHORT-TERM COGNITIVE BEHAVIORAL TREATMENT DOES NOT IMPROVE OUTCOME OF A COMPREHENSIVE VERY-LOW-CALOR

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The purpose of this study was to determine if the addition of cognitive behavior therapy (CBT) targeting binge eating behavior to a comprehensive very low calorie diet (VLCD) program would improve short- and long-term outcome in obese women with binge eating disorder (BED). Seventy-one subjects with BED participated in the 6-month program. They represent a subgroup of a larger sample of 154 women (83 without BED) who participated in the program. During the last 10 weeks of treatment half of the women with BED were randomly assigned to an additional CBT component targeting the eating disorder. The mean total weight loss at the end of the VLCD program was 35.2 lbs (SD 18.4) or 16.1% (SD 8.2) of the original weight. At one year participants had maintained a mean weight loss of 5.5% (SD 10.1) of initial body weight. Forty-seven participants (66.2% of 71) were binge free at the end of the program and 51.8% at the 1 month follow-up. At the one year follow up 56.3% no longer met criteria for BED and 33% were abstinent (no binge eating) during the 6 months prior to the follow-up assessment. There were no significant differences between participants who received and who did not receive the additional CBT component. An additional CBT component added to a comprehensive VLCD program did not improve the results for obese participants with BED with regard to weight and binge eating and with regard to most of the eating related and general psychopathological measures. However, the reduction of binge eating at the end of treatment and at follow-up is comparable with improvements achieved with drug therapy or psychotherapy specifically designed for the treatment of BED.

206 - THE RISK FACTORS FOR DEPRESSION IN FIRST MYOCARDIAL INFARCTION PATIENTS

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Background: Depression affects outcome following myocardial infarction (MI) but the risk factors for such depression have not been established. This study considered whether the causes of depression occurring before and after myocardial infarction were similar to those of depression in the general population. **Method:** Consecutive patients aged less than 80 years, admitted to hospital following their first myocardial infarction, were screened for this study. From consenting subjects, baseline socio-demographic details were recorded including: age, sex, years of education, separation from parents during childhood, current social support and socio-economic status. Past medical and psychiatric history and details of the index MI were also recorded. Subjects were interviewed using the Schedule for Clinical Assessment in Neuropsychiatry (SCAN) and the Hospital Anxiety and Depression Scale (HADS) to detect psychiatric disorders before the MI, and the Life Events and Difficulties Schedule (LEDS) to assess recent life stresses. At 12-month follow-up assessments subjects completed the HADS and gave details of cardiac problems since MI. **Results:** 314 (88% of eligible) patients were recruited; 63% were male. 63 (20%) had depressive disorders. Logistic regression identified the following as independently associated with depressive disorder that had been present for at least one month before the myocardial infarction: age (OR=0.95), female sex (OR=2.3), past psychiatric history (OR=5.7), social isolation (OR=4.7), having marked non-health difficulties (OR=2.4) and lack of a close confidant (OR=9.2). At follow-up 269/298 surviving patients (90%) responded; of 189 participants not depressed at first assessment, 39 (21%) became depressed by the one year follow-up. Logistic regression identified frequent angina (OR=0.96) as the only significant predictor of raised HAD scores at 12 months. **Conclusions:** Depression present in the month before MI has similar risk factors to those seen with depression in the general population, whilst depression developing in the year following MI does not. Further clarification of the mechanisms linking depression to poor outcome may require separation consideration of pre- and post-myocardial infarction depression, and its risk factors.

115 - THE IMPACT OF A BEHAVIORAL INTERVENTION PROGRAM ON HEART RATE VARIABILITY IN CORONARY PATIENTS: THE EXHAUSTION INTERVENTION TRIAL (EXIT)

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Background: Reduced heart rate variability (HRV) is associated with increased mortality after myocardial infarction. Furthermore, a depressed mood is associated with a reduced HRV in coronary patients. Therefore, we determined the impact of a behavioral intervention program on HRV in percutaneous coronary intervention (PCI) patients. The HRV study was part of a randomized controlled trial (the EXIT study) designed to test the hypothesis that a reduction of exhaustion in PCI patients by a behavioural intervention reduces the risk of new coronary events. In EXIT, a beneficial effect was observed of the behavioral intervention on the risk of "late cardiac events" in PCI patients. **Methods:** Inter-beat intervals (IBI's) were measured at home in 134 intervention subjects and 134 controls before the behavioral intervention (baseline), at the end of the intervention (6 months) and at 18 months of follow-up. Subjects took three rests of at least 10 minutes each during the periods. Spectral estimates of the high frequency (HF), low frequency (LF) and total power (TP) were first calculated from the centre 5 minute IBI's of each rest, and subsequently averaged per subject for baseline, 6 months and 18 months respectively. Repeated measures analysis was applied to test for the effect of the intervention program on the averaged HRV indices. Missing values were replaced according to the "intention to treat" principle. **Results:** Preliminary results indicate an increase in HRV in the intervention group and a decrease in the control group between baseline and 6 months. The intervention effect lost its statistical significance at 18 months. **Conclusion:** These findings suggest an improvement of HRV among participants of the behavioral intervention. Whether this improvement in HRV from baseline to 6 months is associated with the beneficial effect of the behavioral intervention on the risk of "late cardiac events" in PCI patients is currently being tested.

52 - EFFECTS OF ROMANTIC PARTNER

INTERACTION ON PSYCHO-BIOLOGICAL STRESS-PROTECTION IN WOMEN

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Positive social interaction has been shown to be associated with an increase of central nervous availability of the neuropeptide oxytocin. In animal studies, the peptide was endogenously stimulated by warmth and massage. The present study focuses on stress protective effects of different kinds of interaction between romantic partners in humans. Seventy-seven women participated in the standardized psychosocial stress test TSST consisting of an unprepared speech and a mental arithmetic task in front of an audience. One third of these women received social support from their partners. A second group received instructed shoulder-neck-massage from their partners immediately before stress and the third group came alone with no intervention before the stress test. Blood samples were collected at five times to analyze oxytocin levels. Subjective stress responses and cortisol were repeatedly assessed in the course of the study. The stressor induced an endocrine stress response in all groups ($F=22.88$, $p<.01$) and, most important, massage before stress exposure significantly reduced the cortisol response compared to the other groups ($F=3.06$, $p=.016$). The results are in line with animal studies and demonstrate the need for cross-disciplinary research to understand the mechanisms of stress protective social behavior. The presentation gives an overview about protective effects of positive social interaction between romantic partners on endocrine and psychological stress response in women.

64 - SELF-EFFICACY IN THE PROCESS OF REHABILITATION: EFFECTS AND DETERMINANTS

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There is a growing body of evidence demonstrating that self-efficacy is an important mediator of treatment-effects in patients with chronic arthritis and joint replacement surgery. We are presenting data showing that baseline levels and growth of self-efficacy to cope with different consequences of chronic arthritis are associated with reduced pain, increased activity, and decreased depressive symptoms in an in-patient rehabilitation setting. Moreover, possible determinants of self-efficacy in the treatment process are examined. We conducted two longitudinal studies. Study 1 tested whether self-efficacy predicted health-outcomes and depressive symptoms at discharge. Study 2 serves to replicate and extend the findings of Study 1 by examining determinants of self-efficacy and relations between patients' knowledge and self-efficacy. Participants of Study 1 were 1065 patients (64.6 ± 10.5 years; 60% female), undergoing in-patient rehabilitation after hip replacement. After admission (T1) and before discharge (T2), we measured health-specific self-efficacy, pain, ADL, and depressive symptoms. Study 2 includes 100 patients after hip or knee replacement. Additionally, we measure determinants of self-efficacy and patients' knowledge. Results of Study 1 show that patients with high self-efficacy at T1 reported better health outcomes and fewer depressive symptoms at T2. Growth of self-efficacy had additional positive effects on final health outcomes. Furthermore, good pre-operative health education was positively related to self-efficacy at T1 and patients who reported at T2 that they would have liked to receive more information at T1 had smaller increases in self-efficacy. Building on these results, Study 2 examines associations between determinants of self-efficacy, knowledge, and self-efficacy. Specific aims are to determine (a) which kind of experiences are beneficial; (b) what patients know about the treatment, (c) how well patients feel informed, and (d) how these aspects contribute to base-line levels and growth of self-efficacy. In sum, patients become more certain that they are able to enhance their health status even without a self-efficacy-based intervention. High self-efficacy at admission and growth of self-efficacy contribute to better health outcomes.

117 - FACTORS INFLUENCING THE GRIEVING PROCESS AFTER TERMINATION OF PREGNANCY DUE TO FETAL ABNORMALITIES

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Issue: Due to developments in prenatal diagnostics, precision diagnosis and prognostic assessment of fetal abnormalities are becoming increasingly feasible in the first and second trimesters of pregnancy. With many disorders, however, the opportunities for prenatal therapy are still very limited. Parents confronted with the diagnosis of a complex fetal abnormality have to decide whether or not to have the pregnancy terminated. Termination is associated with the birth of a death child and protracted grieving. The ability to cope with the loss and the extent of the grief process may be improved by factors such as seeing or holding the dead child, the mother's age, or the perceived support. The aim of this prospective longitudinal study was to identify those factors. Method: In this prospective longitudinal study covering 40 women who had undergone TOP for fetal malformation, we investigated posttraumatic stress (IES-R) and grief response (MTS) at 4 different measuring timepoints (up to 14 months after TOP). Further psychometric instruments included symptoms of depression (BDI, MADRS), anxiety (STAI, HAMA), perceived support (KFB), and 2 questionnaires relating to sociodemographic factors and to the circumstances of the termination respectively. Predictors influencing an unfavorable, protracted course of grieving were to be determined by regression analysis and t-test. Results: Preliminary results show that women do indeed differ in the intensity of their grief reactions and the extent of their stress response. A high degree of grief is experienced, for instance, by women who have a strong sense of guilt towards their dead infant, who had felt their child moving inside them, who had a further pregnancy after the termination, and who received very little support from their partner. Other variables such as the woman's age and the prognosis for the child seem to have little impact, if any. High-risk patients can thus be identified at an early stage, and the cognitive dysfunctions associated with a complex grieving process can be revealed to suggest later components of grief therapy.

304 - TRANSCULTURAL AND GENDER DIFFERENCES IN IBS

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Aim: This is a survey of the epidemiological data on functional bowel dysfunction as reported in different geographical areas. Differences between women and males are also looked for. Method: Literature screening according to medline and other literature search of all the articles retrieved with key words: IBS and epidemiology, gender, cultural features. Even abstracts of papers in less widely spoken languages were retained for analysis when. Results: Different prevalence and incidence data were detected in various geographical areas of the world. The higher prevalence of IBS among women was confirmed (except few contradictory data). Association with psychiatric morbidity and personality alterations was also noted. History of sexual abuse could not be detected in some developing areas. Self-reporting of symptoms during telephone or paper interviews may mask the real figures. Illness behavior has been detected in those studies where one has looked for this feature. Functional abdominal pain seems to be an incomplete form of IBS. Conclusions: There is a diversity of data on the prevalence and incidence of IBS symptoms. These are influenced among other factors by transcultural and gender differences.

109 - SUICIDE AMONG CANCER PATIENTS IN NORWAY 1960-1999

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Objectives: The risk of suicide in cancer patients is reported to be twice that of the general population. However, findings are conflicting due to old studies, non-representative samples, short follow-up periods, misleading definitions and possibly confounding factors. The aims of this study was to: a) assess standardized mortality ratio (SMR) for all cancer patients in Norway who committed suicide during the period 1960-1999 b) assess SMR in relation to sociodemographic variables, cancer type, prognosis measured by extent of tumor (localized vs. nonlocalized), time since cancer diagnosis, and ten-year periods. Methods: The cohort consists of cases of cancer registered in The Cancer Registry of Norway. This cohort was linked to the registry of cause-of-death statistics from the Central Bureau of Statistics in Norway. The link was made between cancer diagnosis from the Cancer Registry and suicide as cause of death. Results: In total, 589 persons (407 males and 182 women) with a diagnosis of cancer committed suicide during the period. The risk was elevated among both males and females, 1.6 and 1.3, respectively, with the highest risk the first months

after diagnosis. Some cancer types (e.g. cancers in respiratory organs) had an elevated risk, while others did not (e.g. colorectal cancers). The excess risk was decreasing during the four decades, and for women the risk was no longer elevated during the 1990s. Conclusions: Cancer is a risk factor for suicide. However, the risk seems to decrease during the study period. This may in part be due to altered attitudes to cancer.

101 - PSYCHONEUROIMMUNOLOGY AND SOMATOFORM DISORDERS OF THE

GASTROINTESTINAL TRACT Elsenbruch, Lucas, Gesing, Straßburger, Pietsch, Braun-Lang, Gilani, Holtmann, Schedlowski. University Clinic of Essen, Department of Medical Psychology & Department of Gastroenterology, Essen, Germany

Background: Very little is known about the psychoneuroimmunological responses to painful visceral stimuli. Therefore, the goal of this study was to analyze the psychological, neuroendocrine, and cellular immune responses to painful rectal stimuli. **Methods:** Irritable bowel syndrome (IBS) patients and healthy controls were studied. The protocol contained 3 phases of rectal distensions: (1) Random ramp distensions to determine threshold for first perception and the maximal tolerated pressure. (2) A series of painful distensions. (3) Random ramp distensions to reassess perceptual and pain thresholds. State anxiety and acute gastrointestinal symptoms were measured with questionnaires. Blood samples were taken for the quantification of natural killer (NK) cells (CD3-CD16+DC56+lymphocytes). The in vitro production of tumor necrosis factor (TNF-) alpha and serum levels of cortisol, ACTH, and catecholamines were analyzed. Blood pressure and heart rate were recorded continuously. To control for circadian factors, blood samples were analyzed on one additional day at identical time points. **Results:** Threshold for first sensation and pain were significantly decreased in patients compared to controls. During painful distension, blood pressure and heart rate significantly increased in both groups. Thresholds for first perception and pain were inversely correlated with state anxiety ($r=-0.6$ and -0.8 , respectively), and with cardiovascular responses (all $r<-0.5$; all $p<.05$). The number of circulating NK cells decreased from 244 ± 153.3 to 155 ± 80.1 cells/ μ l ($p<.05$), and the production of lipopolysaccharide-stimulated TNF-alpha production decreased significantly (basal: 90.1 ± 5.8 pg/ml vs. pain: 52.3 ± 9.4 pg/ml, $p<.05$). **Conclusion:** This study documents that painful visceral sensations evoke psychoneuroimmunological responses, which are linked to interindividual differences in afferent visceral sensory functions. This may constitute a useful model to study the pathophysiology of visceral hyperalgesia in patients with functional gastrointestinal disorders.

275 - BRAIN IMAGING IN GASTROINTESTINAL DISORDERS Enck P. Department of Surgery, University of Tuebingen, Medical Center, Tuebingen, Germany

While investigation of the gut-brain axis seems easy in experimental animal models, it looks quite difficult - if at all possible - in humans, especially in patients. Compared to the indirect approaches with the study of visceral perception, two ways of testing "in vivo" have found application in scientific routine but not yet in clinical medicine recently: One is validation of perception studies, as they were performed over the last decade, with brain imaging technology and other neurophysiological tools - this techniques have successfully been applied in healthy control subjects as well as in patients with functional bowel disorders (irritable bowel syndrome, functional dyspepsia). The other is studies in patients with proven disruption of the gut brain axis, such as following surgical removal of target organ or transection of the spinal cord. Both approaches have been taken in the last years to uncover brain mechanisms following visceral (intestinal) stimulation. Brain imaging of sensory information processing from the viscera has shown that in healthy control subjects the cortical network involved resembles the insular, the anterior cingulate, and the prefrontal cortex, as well as - subcortically - the hypothalamus, the cerebellum, and the brain stem (periaqueductal gray). This network activation is, however, unspecific for the visceral compartment stimulated, and unspecific for the type of unpleasant sensation evolved. Furthermore, both true stimulation as well as sham (or anticipated) stimuli elicit responses in similar brain areas, a phenomenon known from studies with placebo analgesia and treatment of depression. Specificity may be gained with increasing the time domain of the signals, but also with repetition of imaging studies in the

course of a (medical) treatment. Studies in patients with functional bowel disorders have disclosed a lower degree of activation in typical pain processing areas (cingulate gyrus) but more prefrontal activation instead, indicating a higher proportion of vigilance associated with visceral sensation in these patients. Studies in patients with proven disruption of the gut-brain axis, especially with spinal cord transection, have shown that visceral stimulation will result in activation of a similar network, however to a much lesser degree of coordination. Investigation of dynamic changes following medical or surgical interventions finally demonstrated that the brain exhibits plasticity to a degree which makes any assumption about a stable associations between perception and brain activation questionable. In summary, perception studies and brain imaging studies provide complementary tools to elucidate the brain-gut axis in healthy volunteers and in patients with a bowel disorder, be it functional or organic in nature.

150 - GROUP PSYCHOTHERAPY PROGRAM FOR PATIENTS WITH ALCOHOLIC CIRRHOSIS AWAITING LIVER TRANSPLANTATION

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Patients with alcoholic cirrhosis can have symptoms of anxiety and depression, furthermore they are supposed to be abstinent over a period of six months when being placed on the organ transplant waiting list. With the aim of establishing alcohol abstinence and compliance in health behavior a consecutive group of patients were supplied with psychoeducation and problem solving skills in a group psychotherapy program. **Methods:** 41 consecutive patients with chronic alcoholic liver disease admitted to our psychosomatics unit for transplant evaluation consented to take part in a group psychotherapy program. The therapy consisted of a 6 month program with a total of 12 1,5 hour group sessions. Measurements of quality of life (chronic liver disease Questionnaire, Younossi et al., 1999), as well as of anxiety and depression (Hospital Anxiety and Depression Scale; Hermann; Buss & Naith, 1995) were administered to patients at three time points T1 (during the first group session) T2 (during last group session) and T3 (4-5 months after group ending). Repeated-measures ANOVA was used to analyze changes. Alcohol concentration in the breath air was measured in every group session. **Results:** 18 (44%) patients completed the group psychotherapy. 23 (56%) dropped out because of medical illness or death. During the intervention time (between T1 and T2) all completers remained abstinent. An improvement concerning quality of life was measured ($p=0.065$ for body related complaints and $p=0.097$ for psychic complaints) At the first time point the drop-out-group had higher expression of anxiety and depression and lower quality of life than the completers. **Conclusion:** This is the first report of an ongoing study which suggests a satisfactory effect of a structured cognitive-behavioral group psychotherapy program for patients with alcoholic cirrhosis awaiting liver transplantation.

282 - THE USE OF DIAGNOSTIC CRITERIA FOR PSYCHOSOMATIC RESEARCH IN MEDICAL

SETTINGS Fava* GA, Mangelli* L, Ottolini** F, Sonino**** N.

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The evaluation of psychological distress in the setting of medical disease currently rests on the use of the multiaxial diagnostic system of the DSM-IV. Although DSM represents the gold standard for psychiatric disorders, an analysis of their categories most relevant to psychosomatic medicine, underscored the clinical inadequacies in the setting of medical disease. Alternative diagnostic and conceptual frameworks have been proposed to identify diagnostic criteria for psychosomatic research (DCPR). Although these syndromes are not identified by DSM-IV, they seem to be relevant to the course, prognosis and outcome of illness. In a multicenter explanatory study we compared these new criteria (DCPR) with DSM-IV criteria in populations where a high prevalence of psychological problems is expected. Our hypothesis was to verify that the use of both instruments improve the identification of the subclinical symptomatology in clinical settings. 807 consecutive outpatients recruited from different medical settings (gastroenterology, cardiology, endocrinology and oncology) were assessed according to DSM-IV and DCPR criteria. The results

showed a higher number of diagnoses made using the DCPR than the number of diagnoses made with the use of the DSM-IV. 80% of patients showed at least one DCPR syndrome, whereas at least one DSM diagnosis was found in 52% of subjects. While patients who were given a DSM-IV diagnosis frequently had additional DCPR diagnoses, many patients with DCPR criteria did not fulfil any DSM criteria. The joint use of DSM and DCPR criteria was found to improve the identification of psychological factors which could result in a worsening of quality of life patients with medical illnesses. DCPR can be useful in clinical practice not only because these criteria can individuate clinical and subclinical psychological conditions related to medical diseases not captured by standard psychiatric classification, but also because they seem to be able to predict symptom change and treatment outcome.

254 - WOMEN'S HELP-SEEKING BEHAVIOUR IN PRIMARY CARE: PHASE 1 OF A MIXED METHODS STUDY

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Background: Previous studies have described the characteristics of those who attend their GP on a frequent basis but few have focussed on illness cognitions, health anxiety and the relationship with coping. **Aim:** To consider the relationships between health anxiety, psychological distress, illness attributions and help-seeking behaviour in a consecutive series of female attenders within primary care. **Methods:** A sequential mixed methods study included two distinct, yet interrelated phases. In phase 1, 163 women completed the GHQ 28, the Health Anxiety Questionnaire (HAQ) and the Symptom Interpretation Questionnaire (SIQ). Consultation data was also collected from the GP practice database for the twelve month period prior to and six months following recruitment. **Results:** I successfully recruited 183/239 (76.6%) women to phase 1. Number of consultations over the six month period following recruitment was predicted in the final model from the hierarchical stepwise multiple regression by: demographic factors (age, having a health related confidante, having children at home and educated to degree level or above), the number of consultations during the twelve months prior to recruitment and psychological distress as measured by the GHQ 28. These variables accounted for 32.4% of the variance when using log transformed data for the number of consultations during the six months following recruitment as the dependent variable. Despite moderately strong correlations between the SIQ environmental sub-scale ($r = -0.280$, $n = 141$, $p < 0.001$) and two of the Health Anxiety Questionnaire sub-scales: interference with life ($r = 0.303$, $n = 150$, $p < 0.001$), health worry and pre-occupation ($r = 0.231$, $n = 152$, $p = 0.004$) and number of consultations during the six months following recruitment the SIQ and HAQ sub-scales did not contribute to the final model. **Conclusion:** The predictive quantitative model demonstrates the way in which key variables can be used to chart the patterns of primary care utilisation in a population. Whilst health anxiety and symptom attribution did not contribute to the final model, qualitative data in phase 2 highlighted how these variables impacted on help-seeking behaviour. This study has advanced knowledge regarding frequency of attendance by using quantitative and qualitative methods. Implications for future research and clinical practice will be presented.

136 - THE NEURAL CORRELATES OF EATING DISORDERS: AN FMRI PERSPECTIVE

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Anorexia nervosa (AN) has been associated with perinatal brain damage and with macroscopic brain lesions in the right inferior prefrontal cortex. Further indirect evidence for a neural abnormality in AN can be inferred from neuropsychological, neuropharmacological and neuroimaging investigations. 54 women (10 with BN, 16 with AN, 9 long-term recovered from AN, 19 healthy controls) have taken part in a recent study. They were presented with images of food, female bodies and aversive emotional scenes while brain activity was being recorded by fMRI. The reaction to food images best differentiated between women with eating Disorders (ED) and healthy controls. In response to food stimuli, left ventromedial prefrontal cortex was more activated in women with ED than in the comparison group. This abnormal medial prefrontal reaction was present even in women long term recovered from AN. In BN, there was an additional decrease in lateral and apical prefrontal activity. Subjects recovered from AN had

stronger lateral prefrontal response compared to women chronically ill with AN. In response to female bodies, patients showed less activity in ventral occipito-temporal areas than the healthy controls. Because of the variability in subjective ratings among patients, we additionally employed a whole brain correlation analyses. This revealed that subjective aversiveness of female bodies images correlates positively with activity in the medial apical prefrontal cortex and in the hippocampus bilaterally and negatively with the response in the dorsolateral prefrontal cortex bilaterally. There were few between-group differences to non-specific emotional stimuli in the occipital cortex, parietal cortex and in the cerebellum. In conclusion, a ventromedial prefrontal response to food stimuli and a dimensional activation of the medial apical prefrontal cortex in correlation with the subjective unpleasantness of the body-image stimuli were identified as features of ED. It is proposed that an abnormal propensity to activate medial prefrontal circuits in response to inappropriate stimuli is common to eating, obsessive-compulsive and addictive disorders and may account for the compulsive features of behavior in these conditions.

98 - COPING STRATEGIES AND THEIR INFLUENCE ON EMOTIONAL DISTRESS AND QUALITY OF LIFE IN PATIENTS ONE YEAR AFTER IMPLANTATION OF A CARDIOVERTER-DEFIBRILLATOR (ICD)

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The life-prolonging effect of the implantable cardioverter defibrillator (ICD) has been proven. However, the patients are faced with several changes in their lives and must cope with these challenges. In a prospective study of subjective well-being and objective course of the disease, 286 patients with life-threatening cardiac arrhythmias were recruited while awaiting implantation of a cardioverter defibrillator. Patients completed well-validated self-assessment questionnaires (FKV, PLC, GBB, B-L, HADS) before implantation, as well as three months and one year ($n=233$) after implantation. In addition, cardiological findings were documented. Depressive coping (range Beta: .291-.554) was found to be a stable multivariate predictor for all variables of emotional distress (HADS, B-L, GBB) and quality of life (PLC). This effect was independent of psychosocial distress at T0 and cardiological findings. The variability of the coping strategies at the various questioning timepoints led to lower psychosocial distress and higher quality of life after one year. In conclusion, depressive coping is a risk factor for emotional distress and bad quality of life after ICD implantation. This group of patients should be identified early and be offered supportive psychotherapy.

222 - PSYCHOPATHOLOGICAL CONSEQUENCES OF EXTREME TRAUMA IN A POPULATION OF REFUGEES WHO SURVIVED TORTURE

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The objective of this study is to evaluate the incidence of Post-Traumatic Stress Disorder (PTSD), depression, dissociative disorders and psychosomatic pathologies on a population of refugees who survived torture. The aim of this work is to confirm the co-occurrence of these pathologies as consequences of extreme trauma and to point out the presence of multiple pathologies often hidden behind PTSD. We studied 35 torture survivors, examined within 12 months from the traumatic event. The subjects were submitted to a clinical interview in order to assess their psychological and psychosomatic condition; they were also asked to answer to the Harvard Trauma Questionnaire (HTQ), the Beck Depression Inventory (BDI) and the Dissociative Experience Scale (DES) in order to evidence the presence of PTSD, depression and dissociative disorders. Both the interview and the tests were carried out either in English or French when the patients spoke these languages fluently (2nd language) or, if necessary, through the help of a cultural mediator. Psychosomatic pathologies are very frequent in our population and they are directly correlated to the presence of PTSD and depression. Results show a high incidence of PTSD, depression and dissociative disorders. Statistical analysis reveals that dissociative disorders have a significant direct correlation with depression and PTSD. These results are useful to stress the importance of psychosomatic pathologies and their correlation with PTSD and

depression. They also furnish clinical evidences about the importance of dissociative phenomena in traumatized patients and their close relations with PTSD and depression. This study confirms the recent results of neurobiological research about consequences of psychic trauma; further studies are needed, however, to understand the psychopathological consequences of extreme trauma.

8 - THE ETIOLOGY AND NEUROBIOLOGY OF

ALEXITHYMIA Grabe HJ. University of Greifswald, Germany

Background: Previous studies have investigated dysfunctions of interhemispheric communication in alexithymia by means of finger-localisation tasks and found a bidirectional transfer-deficit in male, right-handed, alexithymic individuals. However, other studies have reported dysfunctions of the right hemisphere in alexithymia. We investigated the hypothesis, that inhibitory cerebral mechanisms of the right hemisphere, might be associated with alexithymia. **Method:** Transcranial magnetic stimulation (TMS) was performed in a sample of right-handed students comprising alexithymic males (N=10) and females (N=10) with Toronto-Alexithymia-Scale (TAS-20) scores > 61 and a random control sample students (TAS-20 scores < 61). TMS induces a transcallosal inhibition of motor activity in the contralateral hemisphere which is recorded by EMG. Thus, the transcallosal conduction time (TCT) reflects an inhibitory cerebral activity that is mediated via the corpus callosum. Additionally, personality dimensions (NEO-FFI) and psychopathology (SCL-90-R) were evaluated. **Results:** Only alexithymic males had a significantly shorter left to right TCT than controls ($p=0.002$). This result remained stable in multivariate analysis covarying for personality and general psychopathology. **Discussion:** Our results point to an inhibitory mechanism that could contribute to a suppression of emotional processing within the right hemisphere. Our results clearly oppose the hypothesis of a transfer deficit due to a dysfunction of the CC in alexithymia. In an ongoing study that investigates TCT in a large inpatient sample, the finding of a facilitated TCT in male alexithymics is being supported and seems to extent also to female subjects. These results are being discussed within a neurobiological model that is supported by recent data from brain imaging studies.

42 - SECONDARY TRAUMATIZATION AND BURNOUT IN AMBULANCE SERVICES – FIRST RESULTS OF A LONGITUDINAL STUDY

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Aims. Ambulance service workers have an increased risk to develop stress symptoms, which lead to mental and physical health disorders like secondary traumatization and burnout. The aim of the present longitudinal study is to analyse differences in coping strategies, self efficacy and sense of coherence in ambulance service workers. The study will identify which coping behaviour is effective to deal with the job-related stressful demands and we further examine the relationship between environment and person-factors in view of the development of psychological disorders. **Method.** The sample consists of 186 ambulance service workers. Assessments including PTSD, Burnout, mental and physical health disorders, coping strategies, sense of coherence, self-efficacy and job-related demands. **Results.** First results show that 23% of the sample reported high levels of Burnout Symptoms and 5% met DSM-IV criteria for PTSD. Ambulance service workers with high symptom levels of Burnout are less satisfied with their work conditions and they describe more physical complaints like backache. Job-related factors like time pressure, dealing with relatives lead to more emotional exhaustion, personal factors like emotion-focused coping to more reduced personal accomplishment, both are components of Burnout. Ambulance service workers reporting high PTSD levels feel more control at work and they suffered more psychological disorders like anxiety and depression. **Discussion.** We find a strong relationship between emotion-focused coping behaviour, low sense of coherence and low self-efficacy with mental and physical disorders. These seem to be a resource for coping with daily job demands and extreme assignments.

104 - PHYSICIANS' AND PATIENTS' ASSESSMENT OF PROGNOSIS ASKED BEFORE BMT COMPARED TO OUTCOME 2 YEARS LATER

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Introduction: During the informed consent before BMT patients are fully educated about their prognosis. Does this mean that patients share the physicians' estimates? **Hypotheses:** We assume that: -1- patients with poor prognosis rate their prognosis more favourable than their transplanting physicians do, -2- correlations between depression / anxiety and prognosis are higher for the self ratings, and -3- survival time after BMT shows stronger associations to the expert ratings. **Methods:** Patients with haematological malignancies, scheduled for BMT at the BMT-units of Ulm and Tuebingen (Germany), and their transplanting physicians were asked for the prognosis on a 6-point Likert – scale (1 = very good, 6 = very bad). HADS was used to assess anxiety and depression. Assessments were performed after “informed consent” before conditioning for transplantation. **Results:** 142 patients were recruited from 10/1999 to 12/2001. In a first evaluation of 70 patients, we found that patients assessed their prognosis to be cured more favourable than the physicians (mean ratings 1.9 vs. 3.2, $p < .01$). Self ratings and physicians' ratings do not correlate ($r = -.02$, $p > .80$). Poorer prognoses in the self ratings are correlated with higher scores on HADS anxiety ($r = .58$, $p < .01$) and depression ($r = .62$, $p < .01$). No correlation was found for the physicians' ratings of the prognosis with HADS scores. Survival time is highly associated with physicians' but not with patients' estimates. The presentation will report on the total sample. **Conclusion:** Signing the “informed consent” does not mean there is consent about the information on the chance getting cured. At this point, patients' overoptimistic estimates may be psychologically necessary to go through the life threatening therapy.

17 - ALEXITHYMIA CORRELATES WITH THE SIZE OF THE RIGHT ANTERIOR CINGULATE

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Objective: We investigated a possible relationship between interindividual variability in anterior cingulate gyrus (ACG) morphology and alexithymia. **Methods:** Magnetic resonance images were obtained in 100 healthy university graduates (51 f, 49 m; mean age 25.6 ys). Surface area measurements of the ACG were performed on reformatted sagittal views in both hemispheres. The Toronto Alexithymia Scale (TAS-20) and the Temperament and Character Inventory (TCI) were administered. **Results:** Right ACG surface area significantly correlated with TAS-20 total score in men ($r=0.37$; $p=0.009$) and in women ($r=0.30$; $p=0.034$). After controlling for three TCI subscales (Harm Avoidance, Self Directedness and Self Transcendence), the correlation between TAS-20 total and right ACG became non significant in women, but was only slightly reduced ($r=0.32$; $p=0.032$) in men. A linear regression model with right ACG as a dependent variable revealed brain volume, TCI-harm avoidance and TAS 20 total score as significant predictors in the total sample (explained proportion of total variation (EPTV) 37%). In men, beside brain volume, only TAS-20 total score showed a highly significant contribution (EPTV 41 %), whereas in women only TCI-harm avoidance was a significant predictor (EPTV 36 %). **Conclusions:** Our findings indicate that there is a significant positive relation between the size of the right ACG and alexithymia as measured with the Toronto Alexithymia Scale in healthy subjects. This applies especially for men whereas in women ACG size is more associated with the subscale harm avoidance of the TCI. Our findings also suggest a partial lateralization of human emotion processing, especially negative emotion.

143 - PRACTICE OF PSYCHOSOMATIC TREATMENT FOR BRONCHIAL ASTHMA IN JAPAN

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We would like to present actual practice of psychosomatic medicine in Japan, showing the effectiveness of our psychosomatic approaches to patients with bronchial asthma. In the first study, we examined the effect of stepwise psychosomatic therapies based on the physical severity. The subjects were 200 patients with bronchial asthma. The severity of the disease were classified into four grades (A to D), considering the frequency of asthma attacks, necessity of medication, and restriction of daily life: A (no need for extra visits and no restriction of daily life), B (occasional extra visits for treatment but no

need for continuous steroids), C (need for frequent drip infusion or continuous use of oral steroids), and D (highly restricted daily life because of persistent attacks). Each of these grades corresponds to the four steps of the severity proposed by the Global Initiative for Asthma (WHO). Usual anti-asthmatic medication was applied to all the subjects. The patients in grades B, C, and D were given general information about asthma and instructed self-monitoring with peak-flow meters. Autogenic training and transactional analysis were performed in groups for those in grades C and D. For those in grade D, individual psychotherapy or family therapy were also done. All of 79 cases in grade A at the beginning of the treatment remained in the same grade. Outcome of 121 cases in grade B, C, and D was as follows: improved 61.9%, no change 30.6%, deteriorated 2.5%, and dead 5.0%. In the second study, the long-term effect of programmed psychosomatic therapies was investigated. The therapeutic procedure consists of five stages, namely, establishing the relationship, psychophysiological stabilization and relief from symptoms, facilitating understanding of mind-body interaction, learning new modes of adaptation, and the termination of the treatment. The efficacy was closely related to the progress of the remedy. The data analysis is now under way. In conclusion, general psychosomatic treatment including education and instruction is necessary as well as effective in most asthmatic patients regardless of their physical severity. And specialized psychosomatic treatment should be selected according to the patients' pathophysiology.

144 - PSYCHOSOMATIC AND GENETIC VARIABLES OF OBESITY - A MULTICENTER STUDY

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Objective: This study, represents a contribution in the research of psychosocial and genetic aspects of obesity. Using standardized interviews and psychometric test procedures, psychosocial aspects are evaluated in obese subjects with and without request at weight loss treatment and in normalweight subjects. Obesity-associated, genetic polymorphisms like the melanocortin 4 receptor (MC4R) mutations with special regard to binge eating symptoms are investigated by means of gene typing. **Method:** A sample of 251 Optifast®-participants and 151 patients about to undergo obesity surgery was examined by means of the Composite International Diagnostic Interview (CIDI) and the Structured Interview for Anorexia and Bulimia nervosa (SIAB) and compared to a population-based random sample of 174 normalweight and 128 obese subjects yet without any request at weight loss treatment. **Results:** Lifetime prevalence of psychiatric disorders predominantly depressive, anxiety and eating disorders ranged from 47% to 60% in obese women compared to 42% in normalweight women and from 47% to 53% in obese men compared to 30% in normalweight men. Current psychiatric comorbidity was higher both in obese subjects with and without request at weight loss treatment compared to normalweight subjects. Prevalences of psychiatric disorders were considerably higher in women participating in conventional treatment (Optifast®) or about to undergo obesity surgery compared to normalweight women (OR 3.4, 95% CI 1.8 – 6.3; OR 3.1, 95% CI 1.8 – 5.3). Similar results yet less pronounced could be observed in obese men and women not seeking weight loss treatment compared to normalweight subjects (OR 1.6, 95% CI 0.5 – 5; OR 2.2, 95% CI 1.2 – 4.2). No considerable difference could be found between obese subjects with and without request at weight loss treatment. With regard to MC4R mutation only one obese carrier (0.25%) of the whole sample could be identified. **Conclusions:** Obese subjects suffer considerably more from psychiatric comorbidity compared to normalweight individuals. However no clinical important difference could be observed between obese subjects seeking and not seeking weight loss treatment. Our data do not indicate mutations in MC4R to be a strong contributor to the development of hyperphagia-induced morbid obesity.

191 - ASSOCIATIONS OF NT-PRO BNP WITH QUALITY OF LIFE AND ANXIETY IN MEN AND WOMEN WITH CHF RISK FACTORS

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Natriuretic peptides have been shown to exhibit anxiolytic-like effects in animal studies. It has also been suggested that the very high

endogenous levels of atrial natriuretic peptide typically found in severe heart failure might limit anxiety in heart failure patients. However, nothing is known about the psychological impact of moderately elevated natriuretic peptide levels found in patients with asymptomatic ventricular dysfunction. We therefore studied 422 patients (62.8 ± 10.8 years, 58% men) with risk factors (diabetes, hypertension, stable coronary disease) but without clinical signs of heart failure. Patients completed the SF12 quality of life scale and the Hospital Anxiety and Depression Scale (HADS). All patients also underwent detailed cardiological diagnostics, including assessment of plasma levels of the N-terminal pro-Brain Natriuretic Peptide (NT-proBNP). NT-proBNP was elevated (>100 pg/ml) in 54% of patients, indicating at least slight ventricular dysfunction. Although patients had no clinical signs of heart failure, high NT-proBNP was significantly ($\rho = -.15$; $p = .002$) associated with reduced physical quality of life (SF12). This effect was somewhat larger in men than in women. In men, anxiety (HADS) showed a significant association with (bad) physical quality of life ($\rho = -.38$; $p < .0005$) and an insignificant negative correlation with NT-proBNP. However, after adjusting for physical quality of life in linear regression, the inverse relationship between log-transformed NT-proBNP levels and HADS anxiety scores became significant ($\beta = -.14$; $p < .02$). Although NT-proBNP increased with age, controlling for age didn't change this result. In contrast, neither physical quality of life nor NT-proBNP were associated with anxiety in women. In conclusion, even the moderately elevated endogenous natriuretic peptide levels found in patients with subclinical ventricular dysfunction are associated with reduced physical quality of life, but, at the same time, relatively low levels of anxiety in men. The observation that no such effect can be found in women, requires further study.

293 - PSYCHOBIOLOGICAL FACTORS IN INFLAMMATORY BOWEL DISEASE- THE DESIGN OF THE NORWEGIAN-GERMAN MULTICENTER STRESS INTERVENTION STUDY

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Introduction In Inflammatory bowel diseases (IBD) ulcerative colitis (UC) and Crohn's disease (CD) mechanisms influencing immunological and endocrinological mechanisms are of interest. There is evidence that subjective perceived stress may worsen IBD. **Objective** To characterise IBD-patients with high perceived stress levels and to study whether stress management will improve outcome in IBD. **Methods** 120 patients from four clinical university centers in Norway and Germany with UC or CD endoscopically and histologically verified. **Active disease:** Simple index/activity index >5 and stable on medication last 4 weeks. **Distress level** on the perceived stress questionnaire >60 . After informed consent Randomisation of six groups of each 20 patients to a psychological intervention or treatment as usual group (1:1). The intervention group of 10 patients receives: a manualised stress management program, psychoeducation and relaxation techniques in 3 group sessions and 6 individual sessions of cognitive behavioural therapy once a week. Booster sessions after 6 and 12 month. Follow up time is 18 months, with assessment of somatic activity (assessment by an gastroenterologist baseline 3, 6, 12 and 18 month) and psychological data at baseline 6, 12 and 18 month. **Main outcome measures:** Symptomatic disease activity and endoscopic assessment. Calprotectin in stools. Inflammatory activity in blood and mucosa.

175 - ALEXITHYMIA – EPIDEMIOLOGICAL

FINDINGS Joukamaa M. University of Tampere, School of Public Health, Finland

During the 30 years since its definition alexithymia has been the topic of about one thousand scientific publications. Most of the papers have dealt with the association of alexithymia and some somatic disease or mental disorder. Only few papers have been published on the epidemiology of alexithymia. According to them some fairly clear associations between alexithymia and sociodemographic factors have been found so far. Alexithymia seems to be normally distributed in population. Roughly one out of ten persons in general population is alexithymic, men more commonly than women. The prevalence of alexithymia seems to increase with age. Still, alexithymia has been shown to associate with low educational level, poor social situation,

unemployment and living alone. The results of two large-scale population studies on alexithymia (measured with the Toronto Alexithymia Scale 20) are described in more detail in the presentation.

53 - PROCOAGULANT CHANGES AS A LINK BETWEEN STRESS AND CORONARY HEART DISEASE: STATE OF THE ART

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Numerous large-scale epidemiological studies have shown that a hypercoagulable state (i.e. enhanced clotting and/or impaired fibrinolysis) is prospectively associated with an increased risk of acute coronary events and cardiac mortality in both apparently healthy individuals and patients with coronary heart diseases (CHD). We and other investigators have previously performed a series of studies on effects of acute and chronic mental stress on changes in hemostasis, which embeds coagulation, platelet activity, fibrinolysis, and endogenous anticoagulants. This research suggests that, even in healthy individuals, acute and chronic mental stress both elicit changes in hemostasis molecules compatible with a hypercoagulable state. While these changes are a physiological component of the fight-or-flight response providing an evolutionary benefit (i.e. conservation of blood loss in case of injury), subjects with impaired endothelial function, preexisting chronic stress, mood disturbances, and a poor problem-solving coping style show an exaggerated and potentially harmful procoagulant stress response. Hemostatic changes with stress are largely mediated by the sympathomedullary system, although there is first evidence that the hypothalamic-pituitary-adrenal axis also modulates hemostasis. Epinephrine and norepinephrine surge with stress provokes a discharge of stored hemostasis molecules into the circulation via stimulation of (endothelial) beta2-adrenergic receptors. Catecholamines also activate platelets in vivo by interacting with alpha2-adrenergic receptors. The sensitivity of adrenergic receptors to catecholamines appears to modulate the extent of the stress procoagulant response. First evidence supports the notion that stress interacts with genes coding for hemostasis molecules thereby determining the phenotype of procoagulant changes with stress. Preliminary studies suggest that beta-blocking agents, but probably not aspirin, may attenuate the stress procoagulant response offering one attractive avenue for intervention studies. Before such intervention studies are warranted, we must await the first results from studies testing for a prospective relationship between hemostatic reactivity and increased risk of cardiovascular events. Taken together, the recent years have suggested that hypercoagulable changes occurring with mental stress may represent one psychobiological pathway linking stress with CHD. Some of the molecular mechanisms involved have been described. Future studies are needed to test for the clinical significance of these observations.

178 - PSYCHOSOCIAL PREDICTORS OF HEALTH RELATED QUALITY OF LIFE AND GP

CONSULTATION IN PEOPLE WITH CLBP Keeley P. School of Nursing, Midwifery and Health Visiting, The University of Manchester, United Kingdom

Background: 16 million people experience low back pain (LBP) each year in the UK, with 7% of the adult population choosing to consult their GP for this problem. In 1998 healthcare costs were estimated to be £1632 million; £6000 million when disability payments and lost work production is taken into account. Physical factors have been found to account for only 50% disability associated with LBP, highlighting the need to identify other predictors. Aim: The aim of this study was to examine the relative importance of psychological and social variables in predicting outcome (perceived quality of life and General Practitioner (GP) consultation) for patients with chronic LBP. Method: A consecutive series of 93 outpatients with chronic LBP were recruited at their first appointment following referral to an orthopaedic outpatient clinic by their GP. Standardised questionnaires were used to measure anxiety, depression (Hospital Anxiety and Depression Scale), fearful / avoidant cognitions associated with activity and work (Fear Avoidance Beliefs Questionnaire), and a semi-structured interview using the Life Events and Difficulties Schedule (LEDS) was used to elicit social stress. Outcome measures included perceived physical quality of life (SF-36 Physical Component Score (PCS)) 6 months later and GP consultation over the 6-month follow-up period. Results: 93 patients (86% of

eligible patients) completed both baseline and follow-up interviews and questionnaires; 58% were male. Mean duration of LBP was 5.5 years; 59% scored HAD anxiety 8 or more; 38% scored HAD depression 8 or more. Following multivariate analysis it was found that: Reported physical quality of life (SF-36 PCS) at 6 months is independently predicted by depression ($R^2=15.1\%$, $p<0.001$) and fear-avoidance beliefs about work ($R^2=2.9\%$, $p=0.022$). Variance in GP consultation during the 6 months following initial appointment is predicted by fear-avoidance beliefs about work ($R^2=16.6\%$, $p<0.001$). Conclusion: Both depression and fear avoidance beliefs about work independently predicted quality of life and healthcare utilisation in a representative group of outpatients with chronic LBP. Care should encompass depression and health cognitions to optimise outcome in patients with chronic LBP.

131 - EFFECTIVENESS OF LONG-TERM PSYCHOANALYTIC TREATMENT: THE PRAXISSTUDIE ANALYTISCHE

LANGZEITTHERAPIE Keller W, Rudolf G, Stehle S, Dilg R, Oberbracht C, Grande T, Jacobsen T. Department of Internal Medicine and Psychosomatics, Kliniken im Theodor-Wenzel-Werk, Berlin, Germany

In this presentation a study on analytic long-term therapies is presented, which is carried out in Heidelberg and Berlin (Germany). It is a prospective, naturalistic study, in which 30 psychoanalyses are examined in comparison to 30 low-frequency psychotherapies. Besides the therapist and the patient, external examiners regularly assess the patients and the state of the treatment. While choosing an appropriate methodology, special attention has been paid to the use of instruments which can register the patients' psychodynamically relevant characteristics and the aspects of the psychoanalytic process. Special stress is put on the assessment of structural changes which are supposed to be a special effect of analytic long-term therapies. Some of these methods were developed especially for this study; they will be shown and discussed in the panel. Besides psychometric tests in the course of therapy (SCL-90R, IIP, PSKBSe and a standardised assessment of symptoms by the therapist and independent rater, BSS), the assessment of the patient's "Operationalized Psychodynamic Diagnosis" (OPD) respective focus, using video-taped interviews by external examiners every half year during the course of therapy is basic to the study, as well the assessment of the changes by the Heidelberg Structural Change Scale. Results from different perspectives (patient, therapist, independent rater and data collected from insurance companies will be presented. Both groups showed a highly significant reduction in symptomatic distress from the different perspectives but no differences between both groups. However comparing structural change 60% of patients treated by psychoanalysis showed structural changes whereas patients treated with low-frequency psychotherapy developed this only in 11%. Comparing patients with structural change as we defined it with lower or not structural changed patients there is a significant benefit of the structural changed patients in symptomatic distress, quality of life and satisfaction with therapy. Similar findings were found in health care utilisation data.

137 - QUALITY OF LIFE AND BODY IMAGE OF PATIENTS WITH M. ADDISON

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Research Question: Little empirical research has been conducted regarding the quality of life and body image of patients with M. Addison. The present study examines what aspects of these two constructs have changed as a result of the illness. Methods: We examined 55 patients (17 men, 52+/-17 years of age) who have had Addison for 13+/-12 years and have been treated at the outpatient clinic for 8.2+/-5.9 years. Patients were asked to fill out validated questionnaires which assessed Quality of life (SF36), body image (FKKS) and anxiety and depression (HADS). Various samples from the general population served as comparison, as well as a sample of 90 acromegaly and 172 diabetes patients. Results: We found that the quality of life of Addison patients was significantly lower with respect to perceived restrictions in physical and psychological functioning (SF36) than found in the samples from the healthy population ($p<0.01$). However, compared to patients with diabetes, patients with Addison score an average of 11 points more in 4 of 8 scales of the SF36. With

respect to depressive and anxious moods, the Addison and acromegaly patients report similar values (HADS). The most serious subjectively-experienced restriction can be found in the patients perceived sexual attractiveness (FKKS). None of the above mentioned scales covary with gender or with the type and extent of present treatment. Conclusion: In spite of specialized treatment and good metabolic regulation, patients with Addison report considerable restrictions in quality of life, although to a lesser extent than patients with other endocrinological illnesses. It appears that simply the awareness of being chronically ill leads to experiences of restriction in quality of life independent of the actual somatic situation.

218 - SYMPTOMS OF POST-TRAUMATIC STRESS

DISORDER RELATED TO CARDIAC SURGERY Köllner V, Einsle F, Krauß S, Knaut M, Matschke K, Joraschky P. Department of Psychosomatic Medicine, Bliestal Kliniken, Blieskastel, Department of Psychotherapy and Psychosomatics, Dresden University Hospital, Heart Center Dresden, University Hospital, Germany

Objective: The goal of the present study was to examine the development of psychological strain and health-related quality of life before (T0), six weeks after (T1) and six months after (T2) a cardiac surgery. The possible development of a post-traumatic stress disorder (PTSD) was of special interest. Methods: 250 patients before an elective cardiac surgery were included, 197 participated (74% male, Age: Mean 66.9, SD 8.35 years, 71 % bypass, 21 % valve replacement, 8 % combined surgery). Health-related quality of life was measured by SF 12, anxiety and depression by HADS-D and symptoms of PTSD by IES-R. Results: Anxiety and depression scores were strongest before surgery, declined significantly after six weeks (T1) and remained at constant low level after six months (T2). At that time 5.8% of patients had pathological anxiety scores and 5.3 % pathological depression scores. Regarding PTSD symptoms, hyperarousal did not change, whereas intrusion and avoidance declined significantly from T0 to T1. Six months after surgery 8% of patients satisfied the diagnostic criteria of PTSD according to IES-R after Maercker and Schützwohl. The physical factor of quality of life increased significantly both from T0 to T1 and from T1 to T2, the psychological factor just between T0 and T1. No significant differences were found between the different surgical techniques. Conclusions: Psychological strain is strongest right before a cardiac surgery and decreases significantly after surgery. Instruments to measure a PTSD are also sensitive instruments to indicate distress before surgery. This is particularly true with regard to surgery based intrusions. After six months PTSB was the most frequent mental disorder. More attention should be paid to PTSB in the post-operative treatment of patients with cardiac surgery.

246 - PSYCHIC WELL-BEING AND QUALITY OF LIFE IN LIVING KIDNEY DONORS AND RECIPIENTS

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On the background of shortage of donor organs living kidney donation is increasing in Germany since the beginning of the 90's from about 5% to 19% of all kidney transplantations in 2003. Our research deals with the results of the psychological evaluation of 205 kidney donors and recipients before transplantation and a follow-up 1 year after transplantation. Nearly 60% of the potential donors were women, one third spouses, another parents, and the third other relatives or good friends. There have been a number of contraindications for living donation due to medical reasons, in 4 cases the living donation was not realised because of psychological obstacles. The results showed nearly no psychic impairment in the donors before transplantation and similar results in the patients which was interpreted as a tendency of dissimulation. 1 year after transplantation we found increased quality of life in the patients and only 2 donors with mayor bodily complaints but none with psychic difficulties. The discussion is on possibilities and boundaries of psychological evaluation of living kidney donors as well as implications for research in the field of living kidney donation.

116 - THE IMPACT OF A BEHAVIORAL INTERVENTION PROGRAM ON INFLAMMATION IN CORONARY PATIENTS: THE EXHAUSTION

INTERVENTION TRIAL (EXIT) Kwaijtaal M¹⁾, van Diest R²⁾, Appels A³⁾. Dpts of Medical Microbiology¹⁾, Psychiatry²⁾ and Medical Psychology³⁾, Maastricht University, The Netherlands

Background: Atherosclerosis is an inflammatory disease. Therefore, we determined the impact of a behavioral intervention program on the inflammatory process in percutaneous coronary intervention (PCI) patients. The immunological study was part of a randomized controlled trial (the EXIT study) designed to test the hypothesis that a reduction of exhaustion in PCI patients by a behavioral intervention reduces the risk of new coronary events. In EXIT, a beneficial effect was observed of the behavioral intervention on the risk of "late cardiac events" in PCI patients. Methods: Blood samples were obtained from 99 intervention subjects and 108 controls before the behavioral intervention, at the end of the intervention (6 months) and at 18 months of follow-up. The samples were analyzed for CRP, neopterin, IL-1ra, IL-6, IL-8, IL-10 and TNF- α . Statistical distributions of these markers remained skewed after log transformation. Based upon their baseline values, subjects were therefore assigned to two groups: 1) subjects in the upper quartile, 2) subjects in the lower three quartiles. For each inflammatory marker, the intervention and control group were compared with respect to the percentage of subjects who scored in the highest quartile. In addition, logistic regression was used, controlling the effect of the intervention for baseline values. Results: The risk of being in the upper quartile group for CRP, IL-6, IL-8 and IL-10 was not influenced by the behavioral intervention. The intervention, however, did reduce the risk of being in the upper quartile group for IL-1ra at 18 months by 52% ($p=.05$), and the risk of being in the upper quartile group for neopterin by 69% ($p=.01$). Reduction of exhaustion was significantly associated with the reduced risks of IL-1ra and neopterin. Conclusion: The beneficial effect of the behavioral intervention on the risk of late cardiac events might be due to the effect of the intervention on (part of) the inflammatory process.

200 - EXHAUSTED AND DEPRESSED MOOD, C-REACTIVE PROTEIN AND CORONARY HEART DISEASE IN INITIALLY HEALTHY MEN

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Background: Both plasma concentrations of C-reactive protein (CRP) and a depressive mood have been independently identified as novel risk factor for coronary disease. To examine whether both conditions exhibit a synergistic effect in the prediction of a future coronary event. Methods: Data from three subsequent population based surveys (1984-1995) of the MONICA-KORA Augsburg Cohort Study and an outcome analysis in 1998 were used to analyze baseline high sensitive CRP and a depressive and exhausted mood in 3,021 apparently healthy male subjects aged 45 to 74 years. A total of 165 fatal and nonfatal coronary events occurred during a mean follow-up period of 7.1 (SD 4.0) years. Results: CRP ($p<0.001$) and depression ($p=0.028$) were significantly associated with future coronary events in crude analysis. The interaction term of CRP by depression disclosed a significant effect ($p=0.037$). After adjusting for multiple risk factors the interaction effect lost significance ($p=0.091$) mostly resulting from smoking ($p<0.001$). Applying CRP and depression as categorical variables revealed that high levels of CRP ($p<0.006$) and depression ($p<0.003$) were independently predictive even if adjusted for multiple risk factors. CRP was not predictive in the group with low levels of depression ($n=2,035$). In the depressive mood group ($n=986$) the adjusted hazard ratio (HR) was significantly increased in the top level of the CRP distribution (HR 2.7; 1.3-5.5 $P<0.006$). Conclusions: In apparently healthy men, a depressive mood substantially increases the power of elevated CRP to predict a subsequent MI. Both conditions may share a common underlying mechanism.

278 - INTERNET COMMUNICATION: NEW KIND OF SELF-HELP IMPROVES ACCESS TO PSYCHOTHERAPY FOR EATING DISORDERS

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Objective: Eating disorders are wide-spread among young women and often become chronic illnesses. What is the benefit of internet

communication, a new kind of self-help and reciprocal support among sick persons? Method: 1006 persons filled up an online questionnaire why and how they benefitted from the online group www.hungrig-online.de: anorexia nervosa 24,8%, bulimia 35,4%, anorectic bulimia 21,7%, obesity and binge eating 4,9%. 96,4% female, 13 to 59 years old (mean 23,4). 73,2% reported to be currently ill, 10,1% resp. 7,5% without symptoms or in complete remission for 1 to 6 resp. 6 to 24 months. On the domain information pages about diagnoses and therapies, theme-centered message boards ("forum") and mailing lists are offered. Results: 3500 persons of German speaking countries with 50 000 visits monthly exchanged experiences and information about causes, symptoms, therapy, reactions of relatives. Most important motives to go online were to find peers with the same problems (72,9%), to get information and advice (67,8%) and to break the loneliness (47,2%). 35,5% found support for better coping with their illness, 36,5% were encouraged to undergo psychotherapy. Long-term members showed more remission, drug compliance and readiness for psychotherapy. Discussion: New information and insights and the support by peers enable sick persons to accept their illness and to start a psychotherapy. Online communication facilitates the adherence to professional therapy especially for long-term patients who experience hungriq-online as a last anchor of help. A longitudinal study is planned.

99 - CENTRAL NERVOUS SYSTEM REPRESENTATION OF DYSPNEA: CLINICAL FINDINGS AND PERSPECTIVES

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Dyspnea (breathlessness) is an unpleasant sensation of difficulty breathing and a major and frightening symptom in asthma and other pathologic conditions. The adequate perception of the degree of bronchial obstruction has emerged as a key factor for the prevention of severe asthma exacerbations, especially in current self-management-programs. Incorrect perception of dyspnea has been widely observed across asthmatic patient populations and shown to be associated with both over- and under medication as well as with (near-) fatal asthma attacks. Previous work examined several underlying mechanisms, but predominantly at the peripheral level of the target organ. Studies using respiratory-related evoked potentials (RREP) have shown reduced P1 and P3 components in asthmatic children and adults, indicating deficits in the neuronal processing of perceptual information. However, little is known about the cortical structures involved in the perception of breathlessness from functional imaging studies. Most of the few studies so far used positron emission tomography (PET), and only one employed high resolution functional magnetic resonance imaging (fMRI). None of these imaging studies have included asthmatic patients. Across most studies activation in specific limbic, paralimbic, and cerebellar structures were observed. Among these, the insula seems to play a major role in processing information regarding dyspnea. These areas have also been found activated in functional imaging of pain processing, which has been examined in greater detail in recent years. Because of similarities between both unpleasant sensations, dyspnea and pain, findings and methods from pain research could successfully be adopted for investigations into breathlessness. An overview about current findings of imaging studies on dyspnea will be presented. Furthermore, possible trends for future research on dyspnea with regard to pain perception will be discussed.

32 - COGNITIVE BEHAVIOR THERAPY IN GENERALIZED ANXIETY DISORDERS. RESULTS OF A CONTROLLED CLINICAL TRIAL

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Background. Generalized anxiety disorders (GAD) are amongst the most prevalent mental disorders. There is some evidence that cognitive behaviour therapy (CBT) can be an effective treatment. A controlled clinical trial was done to further evaluate treatment efficacy of CBT in GAD. Method. 72 outpatients, fulfilling GAD criteria according to DSM-IV, were randomly assigned to 25 sessions of CBT (TGA) or a contact control group (CCG). Patients in the CCG were later also treated with CBT (TGB), allowing not only a parallel group comparison but also an A-B-comparison. Therapists were professionals who worked full time in outpatient routine care. Treatment was described in a manual and treatment integrity was

controlled by several methods. Results. The reduction in the Hamilton Anxiety observer rating scale (HAM-A) was 6,4% (1.5 points) in the CCG, 35,4% (9.5 points) in the TGA and 47,3% (10.3 points) in the TGB. In the self rating STAI-S a reduction of 2,7% was seen in CCG, 14,6% in TGA, and 11,6% in TGB. According to the Clinical Global Impression rating CGI, 65.6% of patients were still at least moderately ill at the end of the CCG, while this rate was 33.4% at the end of TGA, or 15,7% at the end of TGB. All these differences between treatment and control group are statistically highly significant. The clinical improvement remained stable over a time-period of 8 months. Conclusions. Cognitive behaviour therapy is an effective method in the treatment of generalized anxiety disorders. Differences between control and treatment group are comparable to or larger than those reported in studies on antidepressant drugs.

59 - THE ROLE OF SOCIAL SUPPORT IN ADHERENCE PROCESSES FOLLOWING A REHABILITATION TREATMENT

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Social support is important to motivate patients to adhere to their exercise programs subsequently to a rehabilitation treatment. In particular, social support is related to adherence to exercise classes, intention to exercise and self-efficacy. Social support serves as a buffer in a stressful situation such as a poor health status. Thereby coping with the health limitation is improved. Only little is known about this relationship in individuals with severe health limitations as well as in rehab settings. The present study focuses on the role of social support in adherence processes following a rehabilitation treatment. It draws on a sample of orthopedic rehabilitation out-patients. 436 orthopedic rehabilitation patients (18-80 years, 60% female) were enrolled in a longitudinal study. Over all, the more the patients perceive social support previously to the rehab the more they increase their exercise frequency. Previous exercise was included by differentiating the patients who had been exercising (maintenance) and the ones who have not (initiative). The patients in the initiative process do not depend on the perceived support previously to the rehab. Patients who are in the maintenance process are more active the more support they perceive. That means in these patients stability patterns are found whereas the newly initiating patients depend on other factors. The findings on the buffering effect are that if the subjective health is poor then the social support is more beneficial for being active. However, this is only true for patients who have been undecided to exercise at the beginning of the rehab and the patients in the maintenance process. No buffering effect could be found in patients who made already a decision but are still inactive. As an interpretation, the health status in these patients is not influential because all are decided and independent. Whether or not the health status is poor or good they are likely to start their physical activity afterwards. In sum, it seems to be effective in the adoption and maintenance of regular physical activity to assist patients to be aware of social support and to mobilize it. Thereby the health status of rehabilitation patients might be increased.

291 - THE EVOLVING DOCTOR-PATIENT RELATIONSHIP: EFFECT ON MEDICAL PRACTICE

Lipsitt DR. Harvard Medical School, Brookline, Massachusetts, USA

Traditional teaching has emphasized the importance of good relationships between doctors and patients as the bedrock of quality medical care. Age-old descriptions and images depict how physicians enhance the healing process through compassionate and leisurely attentiveness to patients' needs. These portrayals of the "golden age" of doctor-patient relationships have been profoundly challenged by new models of medical care. Concern about time-consumption in the health care encounter has become virtually a top priority. Hippocrates could never have predicted the ascendancy of managed care, HMOs, health insurance, and the dazzling array of technological achievements of recent decades. These modifications of the health care "system," emphasizing care of whole populations more than of individual patients, have altered how patients and doctors interact, to the extent that one must sometimes question the Hippocratic axiom of primum non nocere. This presentation will discuss current research on the patient-doctor relationship, how physicians communicate with patients, and how different models of medical care affect chronicity of illness, especially in so-called "difficult patients," and how modern technology and managed care have affected these relationships. Results of a recent

study of chronic somatizers and of focus groups with primary care physicians will be reported.

95 - A RANDOMISED CONTROLLED TRIAL OF MEDITATION FOR ASTHMA: NEW INSIGHTS INTO THE NATURE OF MEDITATION Manocha R. School of Womens' and Childrens' Health, Faculty of Medicine, University of NSW, Sydney, Australia

In order to address inconsistencies in the extant research literature on meditation and its role in healthcare we used a new approach. Sahaja Yoga meditation uses a very different conceptualisation of meditation and incorporates a traditional, very specific yogic understanding of the psychosomatic nature of illness and health. We sought to assess the effectiveness of this therapy as an adjunctive tool in the management of asthma in adult patients who remained symptomatic on moderate to high doses of inhaled steroids. A parallel group, double-blind, randomised controlled trial was conducted. Subjects were randomly allocated to meditation or highly plausible quasi-meditation (stress management and relaxation) control intervention groups. Both the meditation and the control interventions required the subjects to attend a one hour session once per week for four months. Asthma-related quality of life (AQLQ), Profile of Mood States (POMS), airway hyperresponsiveness to methacholine (AHR) were measured at the end of the treatment period and again two months later. Twenty one of 30 subjects randomised to the yoga intervention and 26 of 29 subjects randomised to placebo control were available for assessment at the end of treatment. At the end of treatment, the improvement in AHR, AQLQ mood subscale and total POMS score all improved significantly more in the meditation group than the control group ($p < .05$). These differences were not maintained at the two month follow-up however, suggesting that continued practice of meditation is necessary to maintain effect. These beneficial effects of Sahaja yoga meditation suggest an effect distinguishable from simple relaxation and stress management strategies. The results of this trial and other trials conducted by our research group suggest that one of the main reasons for the heterogeneous outcomes of previously published meditation trials in the literature relates to the use of inappropriate definitions of meditation. The Sahaja yoga definition may offer a new insight into meditation that will help us answer the key question about meditation and its role in psychosomatic medicine: does meditation have an effect distinguishable from rest, relaxation or other conventional behaviour therapies?

31 - HOW DO YOU EXPLAIN A PAIN THAT CAN'T BE SEEN? THE NARRATIVES OF WOMEN WITH CHRONIC PELVIC PAIN McGowan L. School of Nursing/School of Psychiatry, University of Manchester, United Kingdom

Background: Chronic pelvic pain (CPP) is a disabling condition, which many women suffer despite being treated by their doctor, for months or even years. CPP is common among women of reproductive age, but the underlying patho-physiology remains poorly understood (Moore and Kennedy, 2000). It has an adverse effect on women's quality of life; these include psychological distress, and restriction of activities due to the presence of pain. In up to two-thirds of cases no identifiable pathology can be found. GPs have described this group of women as "heartsink" patients, as they are considered difficult to manage and treat. Many women enter a cycle of re-investigation and re-referral, which can lead to dissatisfaction with their care. Aim: The primary aim of this study was to explore the experiences and health care needs of women with CPP (both known pathology and no pathology groups) in community settings. Sample: 32 women volunteers were recruited via a newspaper advertisement. This method was chosen as a way of accessing women with CPP, whether or not they were engaged in mainstream health care services. Method: Women volunteers were asked to write their stories describing their personal experiences of living with CPP. Although a framework was provided, the narrative approach allows for participants to set their own agenda (Riessman, 1993). Analysis: The narratives were analysed using qualitative methods, drawing on the principles of the phenomenological-hermeneutic method, based on the philosophy of Paul Ricoeur (1976). Findings: The main drive of the medical consultation appeared to be focussed on attributing a 'diagnosis'. However, many women do not complete this diagnostic cycle, they

become 'stuck' at a certain point, or re-enter the cycle repeatedly. Women can only 'opt out' of the cycle if the problem is resolved, or by choosing to disengage with medical care. Conclusion: The insights provided by the women's stories highlight their dissatisfaction and disillusionment with the health care system. Many women were no longer actively seeking health care, despite continuing symptoms. Reasons for this disengagement, policy implications, and possible ways forward with this patient group are explored.

77 - THE EFFECTS OF ANTIDEPRESSANTS ON AUTONOMIC FUNCTIONS IN HEALTHY

VOLUNTEERS Mueck-Weymann M, Joraschky P, Poehlmann K, Kirch W, Siepmann M. Dept. of Psychosomatic Medicine, TU Dresden.

Various antidepressant drugs facilitate synaptic transmission via serotonin and/or norepinephrine at central and peripheral neurons. Tricyclic antidepressants and some others may cause autonomic dysfunction such as dry mouth and tachycardia by diminishing neurotransmission via acetylcholine. Aim of our study was to objectify the influence of different classes of antidepressants on autonomic functions in healthy volunteers. Therefore, series of trials were conducted under randomized double-blind placebo controlled cross over conditions. 12 healthy young male subjects were enrolled in each study. Simultaneous measurement of ECG, skin blood flow and skin conductance level (multiparametric biomonitoring) was performed to assess heart rate variability (HRV), inspiratory gasp responses (IGR) and skin cutaneous responses (SCR) during multiple dosing with amitriptyline, bupropion, sertraline, reboxetine, moclobemide or hypericum extract as well as placebo. HRV, SCR and IGR were significantly ($p < 0.05$) altered by subchronic administration of ami, bup or reb. In contrast, ser, moc and hyp did not influence parameters of autonomic function. As an example, root mean square of successive differences which was employed as parameter of HRV was found decreased during multiple dosing with bup (64.7 ± 8.2 ms; mean \pm SEM) when compared to placebo (84.9 ± 15.3 ms; $p < 0.05$). Heart rate was increased under bup (71.5 ± 1.8 bpm) when compared to placebo (65.5 ± 2.5 bpm; $p < 0.05$) whereas blood pressure remained unaltered. In conclusion, assessment of HRV, SCR and IGR allows quantifying autonomic function under treatment with antidepressant drugs. We could demonstrate that different classes of antidepressant agents can impact autonomic functions in normals to a different extent. Thus, non-invasive multiparametric biomonitoring can be used as a tool to mirror safety of antidepressant drug treatment.

231 - ABNORMAL ATTENTIONAL BIAS IN

ALEXITHYMIA Müller J, Alpers GW, Reim N, Süß H. Institute for Psychology, University of Würzburg, Germany

Alexithymia has been theoretically linked to a deficit in the processing and regulation of emotions. Therefore we tested if alexithymics direct less attention towards emotionally relevant stimuli in a modified Stroop-Test. From 124 inpatients of a hospital specialized on psychosomatic disorders 45 patients were selected for high or low alexithymia scores on the Toronto Alexithymia Scale (TAS-20 total score > 60 and < 52 respectively). In addition, the patients were rated by three of their therapists on the Observer Alexithymia Scale (OAS) and divided into a high and low alexithymia group by a median split. The OAS interrater-reliability was high ($ICC = 0.80$). The attentional bias for emotional information was examined with a computerized version of an emotional Stroop task. Four categories of words with different emotional valence were presented: neutral words, positive words, negative words and negative words related to bodily symptoms. The patients were asked to name the colour of the words as quickly as possible while ignoring the meaning of the words. High and low alexithymic patients classified according to their self-ratings (TAS-20) did not differ in their reaction times. However, high and low observer rated alexithymic patients (OAS) differed significantly in the interference indices (reaction time for emotion words minus reaction time for neutral words) for emotionally negative words related to bodily symptoms. Low alexithymic patients showed an interference, while high alexithymics did not. This difference remained significant when controlling for psychopathology and current mood. These findings indicate that highly alexithymic patients process emotional material differently than low alexithymic patients. Highly alexithymic patients seem not to direct their attention towards stimuli which are emotionally relevant for low alexithymics and therefore show less interference. The

results further stress the importance of a multi-method assessment of alexithymia.

176 - INPATIENT PSYCHOTHERAPY: INFLUENCE OF CHILDHOOD ADVERSITIES AND COPING WITH

CONFLICT ON OUTCOME Nickel, R., Egle, U.T. Department of Psychosomatic Medicine and Psychotherapy, Johannes Gutenberg-University, Mainz

Aim: The study examines the interrelation of reported childhood sexual abuse and/or physical maltreatment and immature psychological defense styles and their impact on the treatment outcome at follow-up in inpatients treated with psychodynamically oriented group psychotherapy. **Method:** Prospective cohort study of patients ($n = 138$) recruited consecutively at an inpatient unit for psychosomatic medicine of a German university hospital. Defense styles were assessed using the German modified adaptation of the Defense Mechanism Inventory (DMI), childhood adversities by means of a structured interview, psychological distress using the SCL-90-R and the health-related quality of life (HQoL) with the SF-36. **Results:** The overall effect size for the improvement of the HQoL at follow-up is between $r = 0.82$ and $r = 0.21$, for the psychological distress $r = 0.81$. Patients reporting childhood sexual abuse and/or physical maltreatment compared to those without adversities were more impaired at the beginning of the treatment as well as at follow-up, no interaction was found for the change over time, and both groups improved significantly ($p < .0001$). Patients with immature defense styles and more mature defense styles differed with regard to a higher psychological distress at the beginning and at follow-up as well as the mental dimension of the HQoL, but again both groups improved ($p < .0001$). Patients with immature defense styles improved even more, especially with regard to the physical dimension of the HQoL. **Discussion:** Sexual abuse, physical maltreatment and immature defense styles have an influence on psychopathology in adulthood. Immature defense styles act in part as a mediator. According to the present results, treatment concepts should focus on changing immature defense styles and establishing more mature defense styles.

48 - ALEXITHYMIA FACTORS AND BLOOD PRESSURE HYPERREACTIVITY TO STRESSFUL

TASKS Nyklicek I., Tilburg University, The Netherlands

The notion was examined that alexithymia is associated with an enhanced cardiovascular reactivity to laboratory tasks. Three groups participated in a laboratory experiment: 20 hypertensives aware of their disorder, 20 hypertensives unaware of their elevated blood pressure, and 20 normotensives. Forty-six percent of the participants was female, while age was between 33 and 54 years (mean age was 44, $SD = 5.8$). During the laboratory experiment, participants had to complete the following tasks: determination of one's pain threshold and pain tolerance when confronted with an electric current, mental arithmetic task, delivery of a speech about one's negative characteristics, and viewing two short stressful films. Cardiovascular recordings included continuous measurement of heart period, systolic and diastolic blood pressure (SBP and DBP), and baroreflex sensitivity using the sequence method. Total alexithymia score did not correlate with resting blood pressure, awareness of one's elevated blood pressure, or any of the measures of cardiovascular reactivity to the tasks. Of the alexithymia factors, externally oriented thinking showed correlations with resting SBP ($r = .42$, $p = .002$), resting DBP ($r = .35$, $p = .01$), but not with being aware of elevated blood pressure ($p > .10$). In addition, externally oriented thinking correlated with both overall SBP and DBP reactivity to the tasks ($r = .34$, $p = .01$ and $r = .29$, $p = .04$, respectively). These associations emerged for all tasks, except the speech task. In a regression analysis, controlling for age, sex, body mass index, and resting blood pressure, externally oriented thinking remained a significant predictor of overall SBP reactivity ($Beta = .34$, $p = .01$). In a similar analysis for DBP reactivity, in which being male was a significant predictor ($Beta = .33$, $p = .02$), externally oriented thinking did not reach statistical significance ($Beta = .24$, $p = .07$). One of the alexithymia factors, externally oriented thinking, may be associated with both tonic and phasic hypertension.

73 - COPING WITH TYPE 1 DIABETES: RESULTS OF THE GERMAN MULTICENTER DIABETES COHORT

STUDY Petrak F, Schuster C¹, Luka-Krausgrill U², Egle UT¹, Kulzer B³. ¹Department for Psychosomatic Medicine and Psychotherapy and ²Counselling Centre, Johannes Gutenberg University, Mainz; ³Diabetes Clinic, Bad Mergentheim - all in Germany

Aims: The aim of the present study was to analyze the effectiveness of coping styles in two illness-stages in a homogenous sample of adults with type 1 diabetes. **Methods and Patients:** The presented results are part of the German Multicenter Diabetes Cohort-Study (GMDC-Study) which is designed as a prospective longitudinal cohort study of adults with a new onset of type 1 diabetes. Newly diagnosed adults with type 1 diabetes were consecutively included in 12 different clinics in Germany. Of the 313 initial participants data could be obtained from 89.8% ($N = 281$) at the 1-year-follow-up and 85.3% ($N = 267$) at the 2-year-follow-up. **Results:** Different associations between coping styles and criteria variables of adaptation to diabetes could be observed, according to the different stages of the disease: Compliance was positively related to lower HbA_{1c}-values and increased HRQoL (physical and mental component) in the initial stage. In contrast, in the advance stage this relationship was not longer present. Depressive coping was positively associated to physical and mental HRQoL and diabetes-specific stress. The strength of this associations strongly increases in the two-year follow-up. Trivializing showed a significant association to higher HbA_{1c}-values, diabetes-specific stress and physical component of HRQoL but this relationship emerges not until the advance stage. Active coping was significantly related only to lower diabetes specific stress in the initial stage and higher mental HRQoL in the advance stage. **Conclusion/Discussion:** Effectiveness of different coping strategies changes with the duration of diabetes. Compliance is only moderately related to good metabolic control and HRQoL in the beginning of the disease. Beyond this initial stage no benefit of this coping style could be observed. These findings indicate a clear limitation of the traditional compliance concept. Emotion focussed coping styles -especially depressive coping- is generally related to poor diabetes outcome. A dynamic evolution of this relationship towards considerable increased strength of this association was observed in the second year of diabetes. Data showed no connection between active coping and metabolic control, thus indicating that it might be necessary not only to assess self-reports but to evaluate the accuracy of the adopted self-care behaviour additionally.

39 - GOAL DEVELOPMENT AS A CRUCIAL ELEMENT OF CHANGE MAINTENANCE IN CHRONIC PAIN

THERAPY Pöhlmann K. University Hospital of Psychotherapy and Psychosomatic, Dresden, Germany

Multi-modal CTB-based therapy of chronic pain typically includes education and information about chronic pain, relaxation methods, body therapy to improve body perception and further physical therapy. A solution-focused approach emphasises the significance of goal attainment and increased engagement in life goal pursuit as a crucial indicator of therapy success. As additional indicators of an effective treatment, changes in pain related cognitive and affective dimensions are evaluated. **Method.** The sample consists of chronic patients of the day clinic for pain therapy in Dachau with back aches and head aches as largest groups. A variety of measures – Rating scales for current pain intensity, the Pain Disability Index, the SF-36, the ADS (Depression), the Coping with Pain Inventory and the questionnaire GOALS for the assessment of life goals – were applied to analyse the treatment success of the interventions. Data was assessed at the beginning of treatment (t_1 , $n = 200$), the end of treatment (t_2 , $n = 170$), six months after having finished the treatment (t_3 , $n = 120$) and two years later (t_4 , $n = 45$). **Results.** At the beginning (t_1) the patients showed very low commitments to long-term life goals, particularly with regard to agency (achievement, power, diversion). In the course of treatment they developed new personally meaningful life goals and made progress in their achievement. Other dimensions indicate that the patients profit from the treatment and significantly improve on all pain related and psychosocial dimensions (e.g. PDI, SF-36, HADS). The improvements remain stable six months after having finished the treatment and for the most part also two years later. (e.g. Pain Disability Index: t_1 : $M = 35$, t_2 : $M = 26.2$, t_3 : $M = 22.4$, t_4 : $M = 21.5$; p t_1 - $t_2 = .000$; p t_1 - $t_4 = .000$; p t_2 - $t_3 = n.s.$; p t_3 - $t_4 = n.s.$). **Discussion.** The results indicate that a solution-focused CBT program is an effective approach to treat chronic pain. The development of new meaningful long-term life goals is considered to be an important element in order to cope with pain successfully. Commitment to meaningful life projects is in fact a personalized way to enhance physical and social activity which in turn

seems to be a necessary prerequisite for the maintenance of therapy progress.

47 - BODY IMAGE CHANGES IN PATIENTS WITH PSYCHOSOMATIC DISORDERS DURING IN-

PATIENT PSYCHOTHERAPY Pöhlmann K. University Hospital of Psychotherapy and Psychosomatic Medicine, Dresden, Germany

Disturbances of the body image are characteristics of psychosomatic disorders. The body image can be conceived as part of the self-concept that describes attitudes and representations of the body and its capacities. The objective of the study was (a) to determine the extent of body image disorders in a sample of patients suffering from various psychosomatic disorders and (b) to analyse how the body image changes during multimodal in-patient psychotherapy. Method. To assess the body image three questionnaires were used (FSKN, FBeK, FKB). The three instruments contain 15 scales altogether representing body image dimensions such as physical attractiveness, vitality, physical contact and negative body sensations. The FSKN also provides a global score for the body image as a whole. The sample consists of 70 patients (50 women) suffering from psychosomatic disorders (affective disorders 29.6%, anxiety disorders 19.7%, eating disorders 14.1%, somatization disorders 12.7%). They were undergoing in-patient treatment at the university hospital of psychotherapy and psychosomatic medicine in Dresden. The treatment combined psychodynamic individual therapy with cognitive therapy group sessions and various other treatment elements like body therapy, art therapy, etc. On average, the patients received 15 group sessions of body therapy. Assessments were made at the beginning and at the end of the treatment. Results. At the beginning of the treatment, several scales (e.g. health and well-being, physical contact, vitality) indicated that the patients had a negative body image. At the end of psychotherapy the body image of the patients (global score of the FSKN) had significantly improved. Other dimensions that showed significant improvement were (a) vitality, (b) health and well-being, (c) care for the body and awareness of body functioning, and (c) physical attractiveness and self-confidence (all $p < .05$). The amount of change in the body image was not related to the dose of body therapy. Discussion. The results demonstrate that a negative body image is an essential element of many psychosomatic disorders. In the course of the short, intensive psychotherapeutic treatment some dimensions improve from negative to neutral, yet patients still score lower than healthy persons.

83 - PSYCHOLOGICAL DISTRESS AND RISK OF CHD & MYOCARDIAL INFARCTION Rasul F, Stansfeld S A, Hart C, Davey Smith G. Centre for Psychiatry, Bart's & The London School of Medicine & Dentistry Queen Mary Univ. of London, London, United Kingdom

Objective: To examine the relationship between psychological distress (PD) measured by the General Health Questionnaire and CHD morbidity (ICD 410-414) in two studies. Method: 20 year follow up of 15,460 men and women in Renfrew and Paisley and about 3,000 men in Caerphilly study. Data collected included, sociodemographic, CHD risk factors, physical illness, and hospital admissions for CHD morbidity. In both studies the association between PD and CHD morbidity was assessed using proportional hazards modelling adjusted for covariates. Results: In Renfrew and Paisley PD was associated with 1.78 (1.15-2.75) increased risk of 5-year CHD in age adjusted analysis, and 1.61 (1.02-2.55) in sociodemographic, CHD risk factor and physical illness adjusted analysis. PD was unrelated to 5-year CHD risk in women. In further analysis, compared to healthy, non-distressed men, distressed physically ill men had a greater risk of CHD than non-distressed physically ill men, 4.01 (2.42-6.66) compared to 2.12 (1.35-3.32). In the Caerphilly study PD was associated with 1.92 (1.19-3.12) increased risk of 5-10 year non-fatal Myocardial Infarction in age adjusted analysis, and 2.03 (1.12-3.68) in sociodemographic, health behaviour, CHD risk factor, work characteristics and physical illness adjusted analysis. In further analysis, compared to healthy, non-distressed men, distressed physically ill men had a greater risk of 5-10 year non-fatal MI than non-distressed physically ill men, 2.66 (1.15-6.17) compared to 1.15 (0.57-2.32). Conclusion: PD is associated with an increased risk of CHD irrespective of existing physical illness and its presence confers increased risk of CHD in physically ill men.

283 - DIAGNOSTIC PROBLEMS ABOUT

SOMATOFORM DISORDERS Rigatelli M, Ferrari S.

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"Is this patient somatizing?" is one of the most common questions asked by the internist or the GP to the psychiatrist. Somatization is such a frequent phenomenon that the risk, for the internist, is even the opposite: to quickly categorize as psychogenous a case that afterwards may show organic bases. Patients with Medically Unexplained Symptoms (MUS) are up to a quarter of the average attenders at a GP clinic and up to 40-50% at outpatient clinics in general hospitals [1]. At the same time, borderline medical-psychiatric diagnoses such as fibromyalgia, chronic fatigue syndrome, irritable bowel syndrome, non-cardiac chest pain are becoming more and more numerous in types and prevalence. Nevertheless, full-blown somatoform disorders, the diagnostic category that is naturally expected to include the majority of such demanding and frequent cases, are not so much frequent in the general population and in medical settings, with prevalence rates up to 2%. Somatoform disorders were only 5.3% of total psychiatric disorders diagnosed in Europe by the ECLW study [3]. Our Service's data also confirm this trend: in a 40-month period of activity, 287 patients were referred for MUS (7.98% of total referred patients) but only 44 were diagnosed to be suffering from a somatoform disorder (1.22% of total referred patients and 15.33% of patients referred for MUS). Many authors have attributed the contrast to the insufficiency or inefficiency of traditional diagnostic instruments in such a complex and "slippery" field as that of MUS. Examples of this criticism are the huge international work on DCPR [4] or the accumulating literature on subthreshold somatoform disorders. Consultation-Liaison Psychiatry daily operates within these difficulties: theoretical speculations have to lead the way towards the development of positive diagnostic tools, that are understood by and can be shared with colleagues from other medical specialties. Ref. 1) Royal College of Psychiatrians, Royal College of Psychiatrists: The psychological care of medical patients. A practical guide. Report of a joint working party. II edition, 2003. 2) Huyse FJ et al: Consultation-liaison psychiatric service delivery: results from a European study. Gen Hosp Psychiatry 23: 124-132, 2001. 3) Fava GA et al: Diagnostic criteria for use in psychosomatic research. Psychother psychosom 63:1-8, 1995.

185 - BREATHING TRAINING AND BIOFEEDBACK AS ADJUNCTIVE TREATMENTS IN ASTHMA Ritz T.

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Breathing exercises and biofeedback have been recommended frequently as adjunctive treatments for asthma. Various breathing techniques such as abdominal breathing, inspiratory muscle training, pursed-lip breathing, modifications of breathing pattern or hypocapnia, or nasal breathing have been proposed. A review of the current literature shows that little systematic evidence has been published on the benefits of these techniques in asthma patients, although at least some of the techniques are based on valid psychophysiological assumptions. Results of trials using biofeedback techniques in asthma are disappointing, with little evidence for the usefulness of EMG biofeedback-assisted relaxation, biofeedback of respiratory resistance, tracheal-noise, inspiratory volume, or heart rate. More positive effects have been reported recently using heart rate variability biofeedback. We present pilot data from a trial investigating the efficacy of pCO₂ biofeedback-assisted breathing training. Patients were treated with a 4-week program of biofeedback-supported paced breathing home training and supervised training sessions. PCO₂ was displayed using a hand-held miniature capnometer with electronic data storage. Asthma patients also performed self-assessments of lung function and symptoms with an electronic pocket spirometer and diary. The results showed that systematic and lasting increases in pCO₂ levels can be achieved by asthma patients. Asthma symptoms were reduced and asthma control increased by the training, while basal lung function remained largely unchanged. In conclusion, biofeedback and breathing training methods with a valid psychophysiological rationale can achieve improvements in asthma symptomatology. More research is needed on the psychological and physiological mechanisms as well as the efficacy of individual techniques in asthma.

84 - THE INFLUENCE OF EMOTIONAL CONTENT OF VISUAL STIMULI ON ENCODING ACTIVATION: AN FMRI-STUDY Röder CH¹, Morawetz C^{1,2}, van de Ven V³, Overbeck G¹, Linden DEJ^{4,5}, 1 Dept. of Psychosomatic Medicine and Psychotherapy, Johann-Wolfgang-Goethe-University Frankfurt, Germany; 2 Dept. of Psychology, University of Klagenfurt, Austria; 3 Dept. of Cognitive Neuroscience, Faculty of Psychology, University of Maastricht, The Netherlands; 4 School of Psychology, University of Wales, Bangor, Wales, U.K.; 5 Max Planck Institute for Brain Research, Frankfurt, Germany

Emotional stimuli can be expected to gain preferential access to memory because of their importance for species survival. Behavioural studies have demonstrated that emotional valence of stimuli enhance explicit memory. In imaging studies, negative visual stimuli were associated with increased activation of the amygdala, and positive with that of orbitofrontal areas. The present study investigated the influence of negative, positive and neutral emotional visual stimuli on encoding and recognition with fMRI. Method: Thirteen right-handed healthy subjects (5f/8m) participated in an encoding and recognition task separated by a 2-week interval. Pictures were selected from the International Affective Picture System. During encoding 75 pictures were presented in pseudorandom order. Subjects had to memorize the stimuli. During recognition, these and 75 new pictures were displayed. Subjects responded by pressing a button to indicate whether they had seen the picture before or not. After measurement subjects rated each picture for valence and arousal on a scale from 1 (extremely pleasant/exciting) to 9 (extremely unpleasant/calm). Whole brain-fMRI was acquired on a 1.5 Tesla scanner with a low TE of 29ms for fMRI to reduce susceptibility artefacts in mesiotemporal regions Data were processed and analysed using BrainVoyager 4.9 software. Results: Behavioural results showed better recognition for negative than neutral pictures ($F [1,13] = 10.286$; $p = 0.008$). Encoding activated a network of visual, insular and temporal regions. Correctly recognised pictures were associated with activation in bilateral insular region, temporal pole and visual areas at encoding. In a second step recognition results were analysed for each emotional category separately. This yielded a bilateral amygdala activation that was specifically associated with the successful encoding of negative pictures. Conclusion: Behavioural results of the present study demonstrate an effect of emotion on recognition of previously seen pictures. This is reflected by a bilateral activation of the amygdala during encoding of negative pictures that were correctly recognised in the recognition trial. These findings support the view that the amygdala influences storage processes related to negative stimuli.

152 - PSYCHOSOMATIC FACTORS DETERMINE THE QUALITY OF LIFE AND METABOLIC CONTROL IN PATIENTS WITH DIABETES Rose M, Georgiewa P, Fliege H, Kocalevent R, Arck P, Klapp BF. Psychosomatic Medicine, Charité, University Medicine Berlin, Campus Mitte, Berlin, Germany

Introduction: The primary goals in treating diabetic patients are maintaining blood sugar levels as close to the norm as possible and making a relatively normal quality of life achievable. Both of these goals are influenced by a multitude of factors, which, although usually examined in isolation, should actually be seen to build a complex network. In this study, we examine whether a mathematical model can be construed which depicts the relationship between the variables and their relative significance for achieving the targeted treatment goals. - Methods: 625 patients were examined (224 type I, 401 type II), coming from 32 different treatment facilities. All patients were asked to fill out standardized questionnaires (264 items) with respect to their quality of life (WHOQOL-Bref), coping behavior (FKV), diabetes-specific knowledge (DWT), doctor-patient relationship (MISS) and personality characteristics (GTS, SWOP). HbA1c values were measured in HPLC technique. The statistical evaluation was carried out by means of a structural equation model (SEM) using AMOS 3.6. - Results: The constructed model proved to be valid ($\chi^2=74.3$, $df=63$, $p=.16$), showing a sound goodness of fit ($AGFI=.94$, $Cmin/df=1.18$). It shows that persons characterized by strong feelings of self-efficacy and an optimistic outlook on life are, on average, more likely to be satisfied with their doctor-patient relationship, demonstrate more active coping behavior, and prove to be more informed about their treatment process. The effect of these psychological variables proved to be more significant for the targeted HbA1c values and the quality of life (61% variance solution) than the severity of the diabetes

itself, measured by the number of secondary illnesses present. - Conclusion: With the use of a SEM, it was possible to illustrate the mutual dependency of various individual factors involved and their individual significance for the treatment goals within an integrative network.

230 - BODY IMAGE AND SELF-REGULATORY CAPACITIES IN TRAUMATIZED PATIENTS Sack M, Jäger B. Department of Psychosomatic Medicine and Psychotherapy, Hannover Medical School, German.

Although the adverse effects of (early) psychological traumatizations on the development of body self, body image and self-regulation are obvious, little empirical knowledge exists on body image in traumatized patients. We hypothesized that multiple traumatizations in early life would be associated with more severe disturbances of body image as well as with impaired self-regulatory capacities. Methods: A sample of 103 traumatized outpatients (77 female, mean age 36.4 years) was carefully assessed with structured interviews (SCID-PTSD, SCID-D, SIDES) and questionnaires (IES, DES, SOMS, STAI, FKB-20, TAS-20). A subset of 62 patients additionally underwent psychophysiological assessment (HR, RMSSD) during a traumatic reminder. Body image was assessed with FKB-20, a 20 item questionnaire in German language (Löwe u. Clement 1996). FKB-20 includes two scales replicated by factor analysis: 1. negative evaluation of the body, 2. positive perception of body dynamics. Internal consistency for both scales is $r = .84$ as reported by the authors of the questionnaire. Results: Body image distortions were significant more prominent in multiple traumatized patients compared to single traumatized patients ($F(1,90) = 11.8$, $p < .001$). Negative evaluation of the body was negatively correlated with age during first trauma ($r = -.344$, $p < .001$) as well as positively correlated with difficulties in identifying and describing feelings ($r = .384$, $p < .001$ and $r = .309$, $p < .011$ respectively) as derived from Toronto Alexithymia Scale (TAS-20). Positive perception of body dynamics was negatively correlated with heart rate reactions during a traumatic reminder ($r = -.415$, $p < .001$) and positively correlated with vagal tone as assessed by RMSSD which can be regarded as a psychophysiological indicator for self-regulation capacities ($r = .317$, $p < .012$). Conclusion: Multiple traumatizations in earlier life are associated with a negative evaluation of the body and with restricted perception of body dynamics. Our results add empirical data to the discussion about self-regulation development and its vulnerability to traumatizations in early life.

190 - TEMPORAL STABILITY OF ALEXITHYMIA - A 5-YEAR FOLLOW-UP STUDY IN GENERAL POPULATION Salminen JK, Saarijärvi S, Toikka T, Äärelä E, Kauhanen J. Research Department, Social Insurance Institution, Turku, Finland

Temporal stability of alexithymia has been discussed in recent years. Most studies on this issue are based only on a few months' follow-up and clinical or otherwise selected populations. For this report, we studied the temporal stability of alexithymia in a general population sample over five years. In 1996, a TAS-20 questionnaire was sent to 2,000 Finnish people (18–64 years). The response rate was 64% ($n=1,285$). In 2001, the TAS-20 questionnaire was again sent to the 1,285 respondents. A total of 940 subjects (73.2%) responded. The TAS-20 scores of the respondents ($M=400$; $F=540$) at the baseline and at the follow-up were compared. Results: In men the mean TAS-20 score was 48.5 at the baseline and 47.4 at the follow-up ($p=0.027$), and in women 44.2 and 42.8, respectively ($p=0.001$). Pearson's correlation coefficient for the scores at the baseline and at the follow-up was 0.666 in men and 0.652 in women. Prevalence of alexithymia (=score of 61 or more) was 13% in the whole population ($M 17\%$; $F 10\%$) at the baseline, and 11% ($M 14\%$; $F 8\%$) at the follow-up. Gender difference for the prevalence of alexithymia was significant both at the baseline ($p=0.006$) and at the follow-up ($p=0.006$). Conclusions: Despite the slightly lower mean TAS-20 scores at the follow-up than at the baseline, the correlation between the scores was high. It is concluded that alexithymia is a rather stable psychological characteristic in general population, when assessed over several years. The gender difference in the prevalence of alexithymia also seems to persist.

172 - STRESS INDUCED CHANGES OF CYTOKINES OF T LYMPHOCYTES IN ATOPIC DERMATITIS

CONSIDERING IGE LEVELS Schmid-Ott G. Department of Psychosomatic Medicine, Hannover Medical School, Hannover, Germany

Objective: Multiple exogenous and endogenous provocation factors such as psychological stress can induce the exacerbation of atopic dermatitis (AD). In addition to CD4+ T-helper cells and CD8+ T-lymphocytes IgE is suggested to be important for the pathophysiology of AD. Thus, the focus of this study is to compare the effects of acute psychological stress on illness-specific immunological parameters in AD patients with high IgE levels and healthy controls (HC). **Methods:** Patients with AD (n=15) and HC (n=15) were exposed to a brief laboratory stressor (public speaking and mental arithmetic). In vitro analyses were done 1 hour before, immediately after and 1 hour after stress exposure. Lymphocytes and intracellular cytokines in blood-derived lymphocytes were analysed by flow cytometry. Previously published Data comparing the whole groups of AD patients and HC (n = 15 each) were reanalysed by dividing the AD sample into two subgroups, discriminating patients with a high level (n = 6) versus a low level (n = 9) of IgE (cutoff=1000 kU/l). **Results:** A significant interaction effect for stimulated IL-5 positive CD4+ and CD8+ T cells could be shown (p<.05), indicating a significant elevated number and a pronounced stress-induced increase of these cell types in AD patients with high IgE levels compared to HC. In addition, a trend (p<.1) was observed for IL-4 in the supernatant with more marked stress-induced changes in AD patients. **Conclusions:** This reanalysis shows that there are different immunological influences of psychological stress in patients with high and low IgE levels.

159 - EMOTIONS, CARDIOVASCULAR REACTIVITY AND BLOOD PRESSURE IN EVERYDAY LIFE IN HEALTHY YOUNG WOMEN

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In this study cardiovascular reactivity in healthy young women was investigated in relation to emotions and blood pressure (BP) in daily life. High and low reactors assessed during a reaction time task (RTT) were compared according to measures of anger, anxiety, response to stress, family history (FH) of cardiovascular disease, continuous measures of physical activity (multiple calibrated accelerometry), BP and heart rate (HR) during two laboratory test sessions as well as during 24 hours of everyday life using a PORTAPRES model 2. Fifteen high and 15 low reactors, not differing in BP or HR at baseline, were selected from a group of 55 on the basis of their rate pressure product (SBPxHR) reactions during the RTT (∆RPP: 90.7 vs 14.6 mmHg/min; p<0.001). High and low reactors did not differ significantly regarding age (25.1 years), height, weight, BMI, smoking, alcohol consumption, aerobic fitness or continuous measures of physical activity in daily life during ambulatory BP measurement. Compared to low reactors high reactors showed higher scores for trait anger (STAXI T-A: p<.05; TA/T: p=.03) and trait anxiety (STAI X2: p<.03). Low reactors responded to stress (SVF) with more distraction (p=.005), control of their reactions (p=.015), self-affirmation (p<.03) and guilt defence (p<.05). High reactors had a FH of hypertension (p=.03), stroke (p=.005) and myocardial infarction (MI) (p=.01). On repeating the laboratory test session after 50 days the high and low reactor groups showed no significant differences regarding measures of BP, HR or RPP reactions during the RTT (∆RPP: 33.5 vs 24.6 mmHg/min; ns). But in daily life high reactors exhibited higher BP measures (122/70 vs 109/62 mmHg; p=.04/.076) and in multiple regression analysis a lower BP variance explained by daily physical activity (by 21/16%; p<.03) pointing to a greater emotional influence on BP. The BP difference was most pronounced during sleep at night (108/61 vs 92/50 mmHg; p=.03/.053). These results reveal a condition in young women exhibiting elevated blood pressure in everyday life which is related to a FH of cardiovascular disease, to emotional conflict and marked cardiovascular reactions in new situations, all appearing to be a psychosomatic prerequisite for developing hypertension later in life.

67 - EVIDENCE FOR RESILIENCY IN OLD AGE*

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Aim of the study: The presentation investigates adjustment to the physical aging process and examines factors which may influence psychic resiliency in the elderly. **Methods:** 261 participants in an extensive examination between 1994-1997 were again contacted five years later. 62.8% were deceased or fulfilled exclusion criteria, 23 denied participation. 74 patients could be included in the second measurement point. They were examined by means of self-rating instruments, expert rating and biographical interviews. In order to explain subjective well-being as an indicator of resiliency, we tested a path model that was formulated in advance, according to literature. **Results:** Although somatic diseases and disabilities increased dramatically between the two measurement points, subjective well-being as well as the expert rating of psychogenic impairment did not deteriorate. The previously formulated path model explained the data well. **Discussion:** We could confirm our hypothesis, that subjective well-being is influenced more by a person's subjective assessment of a situation and by personal resources (sense of coherence) than by objective parameters. This indicates high resiliency in the cognitively not impaired elderly.

*funded by the German Research Association

127 - DEPRESSION AND QUALITY OF LIFE IN PATIENTS WITH CHRONIC HEART FAILURE

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Chronic heart failure is an increasingly common disorder with a high mortality rate and extreme limitations in quality of life. Several studies have shown that patients with a comorbid depressive disorder - even subthreshold depressive symptoms - had a worse health status and an increased risk of mortality than patients without depression. Although the reported prevalence rates of comorbid depression were inconsistent, the prevalence of depression is higher in patients with heart failure as compared to the normal population. **Objectives:** The present study analysed the prevalence of comorbid depressive disorder in patients with chronic heart failure in an outpatient clinic-based sample in Germany. The study explored the association of the severity of depressive symptoms with measures of cardiac function, patient-reported symptom distress, overall health status, physical limitations and quality of life. **Methods:** The Patient Health Questionnaire (PHQ) was used to measure depressive symptoms and to ascertain a probable diagnosis of depression. The cardiac function was assessed by recording the left ventricular ejection fraction by echocardiography. For the measurement of generic quality of life we used the Short Form-36 Health Survey (SF-36) and for the measurement of disease-specific quality of life the Kansas City Cardiomyopathy Questionnaire (KCCQ). The KCCQ also quantifies symptom distress, overall health status and physical limitations of patients with heart failure. The patients were recruited at the cardiological outpatient clinic of the University of Würzburg. **Results:** Of the 235 participants, 70 (30.4%) suffered from either a major or a minor depression according to PHQ. Depression was not associated with age and gender. The severity of heart failure (severity classification of the New York Heart Association, NYHA), poorer overall health status and quality of life were all correlated with depression. There was also an association of depression with a high symptom distress. **Discussion:** Depressive symptoms among patients with heart failure are common and associated with severe restrictions in different aspects of health-related quality of life. It has to be discussed, whether depression is the consequence or a causal factor of the low quality of life.

54 - PHYSICAL EXERCISE ADHERENCE IN REHABILITATION PATIENTS

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Physical exercise and psychosocial correlates were examined longitudinally in rehabilitation patients who were advised to improve their activity levels. Social-cognitive variables such as perceived self-efficacy, outcome expectancies, intentions, and planning were compared to age, sex, and body weight as potential predictors of exercise. A longitudinal sample of 509 orthopedic rehabilitation

patients was studied. The purpose was to explore further the parameters of the Health Action Process Approach (HAPA; Luszczynska & Schwarzer, 2003; Renner & Schwarzer, 2003; Schwarzer, 1992; Schwarzer & Fuchs, 1995; Schwarzer & Renner, 2000). This theory suggests a distinction between the motivation processes that come into play before a goal is set, and the volition processes that arise afterward. Before people change unhealthy habits, they need to become motivated to do so. This is a process leading toward an explicit intention. Three variables are considered to play a major role in this process: (a) risk perception, (b) outcome expectancies, and (c) perceived self-efficacy. Previous studies have confirmed some features of the HAPA model, mainly in the context of physical exercise (Schwarzer & Fuchs, 1995), preventive nutrition (Renner & Schwarzer, 2003; Schwarzer & Renner, 2000), and breast self-examination (Luszczynska & Schwarzer, 2003). The role of the three constructs in the motivation phase (risk perception, outcome expectancies, self-efficacy) has been examined, as well as their prediction of intentions and behaviors. It has been confirmed that, in cross-sectional designs, risk perception plays only a minor role, if any, and that the initial influence of outcome expectancies vanishes as individuals move from motivation to volition. This longitudinal study on 509 orthopedic rehabilitation patients has documented changes in physical exercise levels along with corresponding changes in intentions and planning. Moreover, self-efficacy and outcome expectancies were found to be direct precursors of intentions and planning, and indirect ones for exercise. The effects of social-cognitive variables on exercise were stronger than those of age, sex, and body weight.

336 - TWO-YEARS FOLLOW-UP STUDY OF 495 PATIENTS TREATED AT THE INSTITUTE OF PSYCHOSOMATIC MEDICINE IN GOTHENBURG, SWEDEN Sivik T. Institute of Psychosomatic Medicine, Gothenburg, Sweden

Since 1993 the Institute of Psychosomatic Medicine have been investigating and treating patients according to the Psychosomatic Integrative Paradigm. The evaluation is conducted over period of one week and by a staff trained in psychosomatic medicine and includes following personnel categories: physician, psychologist and physiotherapist. All patients also go through extensive psychometric (12 inventories) testing as well as laboratory investigation. Out of 2145 that over the years have been evaluated at the clinic, 876 have been treated. After treatment all the patients go through same investigation as prior to the treatment. Follow up investigation is performed one year after and 2 years later a self administered questionnaire is sent to all the patients. Until today 495 patients have subjected to the 2 years-follow up study. We will present the major results of the 2 years follow up for all the patients. We will particularly focus on the presentation of the results of the treatment with a group of 80 women that were referred to the clinic with the diagnoses of Burn-out syndrome. The comparison with a control group of 48 patients treated at Family medicine centre reveal the superiority of an integrative approach to the problem of Burn-out syndrome.

194 - PSYCHIATRIC CASENESS AND SF-36 HRQOL BEFORE AND AT 4M AFTER LIVING KIDNEY TRANSPLANT Smith GC. Monash University Department of Psychological Medicine, Clayton, Australia

Methods: Prior to operation (preop) and at 4 months post-operatively (postop) recipients completed the SF-36 Health Survey and the Patient Health Questionnaire and underwent a semi-structured interview with the liaison psychiatrist. Psychiatric [caseness] on DSM-IV Axis I was established using all data available. Data on length and number of inpatient stays, graft function (failure, rejection episode, elevated serum creatinine level), hemoglobin level, CMV infection status and prednisolone dose were used as physical outcome measures. Results: Fifty six of the 58 patients who received a transplant over a 5-year period completed both assessments. Twenty (36%) met criteria for psychiatric caseness preop and 20 (36%) postop; 7 ceased being cases and 7 became new cases. SF-36 summary Mental Component Scale (MCS) score preop was 45.8, b12.6SD and summary Physical Component Scale (PCS) score 41.9, b10.6SD. All SF-36 sub-scale scores except Bodily Pain, Role-Emotional and Mental Health were significantly lower than those of the Australian population, with

large effect sizes (>0.80 SD units). There were no differences between cases and non-cases on age, sex, diabetic status, PCS score or donor status (carer vs non-carer). Caseness preop was associated with a significantly lower MCS score (cases 35.7, b15.2SD vs 51.5, b5.6SD for non-cases, $p<0.001$), a large difference (>0.80 SD units). Scores on all SF-36 sub-scales except General Health were also significantly lower for cases ($p<0.05$). Clinically large differences were seen for the sub-scales of Role-Physical, Vitality, Social Function, Role-Emotional and Mental Health. Cases preop had greater improvement in SF-36 scores after transplant, but RE (role limitation due to emotional factors) and Mental Health remained significantly lower than for non-cases. There were no statistically significant differences between cases and non-cases in transplant outcomes for all models (unadjusted; age and sex adjusted; age, sex and HRQOL subscale scores adjusted or age, sex and HRQOL summary scores adjusted). However there were clinically relevant differences: hemoglobin level, serum creatinine level and CMV infection were higher in cases and graft failure lower. Conclusions: The high level of psychiatric caseness and psychosocial functional impairment detected in this cohort is consistent with that found in other studies. Further prospective studies are needed to see whether the poorer transplant and psychosocial function outcome suggested by the outcome data are robust enough findings to have psychiatric caseness and poor psychosocial function pre-operatively considered as relative exclusion criteria.

18 - THE EMERGENCE OF AN AMERICAN PAIN MANAGEMENT CULTURE AND DIFFICULTIES

TREATING CHRONIC PAIN Streltzer J. Department of Psychiatry, University of Hawaii, School of Medicine, Honolulu, USA

Cultural differences have traditionally been felt to influence the expression of pain. In the USA, fears of drug addiction led to general undertreatment of pain in all ethnic groups in the 1960s and 1970s. Perhaps in response, dramatic changes in pain management (PM) approach led to great improvements in the treatment of acute and terminal pain, and the formalization of Pain Medicine as a subspecialty by the major accrediting organization in American medical education. Nevertheless, management of chronic pain has become increasingly problematic in recent years. An analysis of PM literature and of Internet communications on a PM list server was undertaken to shed light on this issue. Results suggest that a "medical culture" of PM has developed with distinct beliefs and values, and this "pain management culture" has stimulated the explosion of prescription drug abuse that vexes pain clinicians and has been highly publicized in the American media. This PM culture is not defined by science, but represents certain values (pain is the 5th vital sign) and a belief system, which are resistant to change. Examples of these beliefs include: The induction of secondary spinal processes explains pain that occurs without objective findings (the evidence is that chronic opioid intake produces these changes); opioids given chronically do not lose their effectiveness (evidence – enhanced pain sensitivity may occur); and, opioid dependence by prescription is OK because it is not addiction. A case example of a pseudoneurologic diagnosis treated with megadose opioids is analyzed on the basis of these medical cultural values and beliefs.

27 - ALEXITHYMIA: SOME CONTROVERSIAL ISSUES AND NEW CONCEPTUAL IDEAS Taylor GJ. University of Toronto, Toronto, Canada

This paper will first review part of the historical background of the alexithymia construct. It will be noted that an impairment in the symbolization of emotion, and explanations in terms of psychological defenses or developmental deficits, have been suggested ever since clinicians first described the characteristics that led to the formulation of the construct. The paper will then outline some new conceptual ideas about emotional processing and symbolization that are derived from cognitive science, attachment research, and contemporary psychoanalysis. In particular, attention will be drawn to associations between alexithymia and insecure attachment styles, and to an overlap of alexithymia with the recently introduced concept of desymbolization, which has been described in both pervasive and segmental forms. It will be shown how these new ideas allow for an interaction between deficit and defense in the conceptualization of alexithymia, and for the possibility of identifying both stable and variable manifestations of the construct. The paper will demonstrate how this conceptual approach, supported by some preliminary research

findings, can begin to resolve some current controversies surrounding the alexithymia construct. These include differences of opinion about the stability of the construct, whether it should be conceptualized as a dimensional or categorical phenomenon, and whether it represents a defense against depression or other distressing affects rather than a deficit in the symbolization of emotion. The new conceptual ideas will be used also to respond to the view of some researchers that alexithymia should be categorized into two main forms or subtypes that are based on the presence or absence of emotional experience.

207 - IRRITABLE BOWEL SYNDROME IN TWINS: HEREDITY AND PSYCHOLOGICAL FACTORS BOTH CONTRIBUTE TO ITS DEVELOPMENT Tomenson B, Creed F. Psychological Medicine Research Group, University of Manchester, United Kingdom

Introduction and Aim: The aetiology of irritable bowel syndrome is not well understood. One previous twin study has suggested that environmental factors are more important than genetic ones. This study aims to assess the relative contribution of genetic and psychological factors on the development of irritable bowel syndrome (IBS). **Method:** A random sample of 6000 twins between the ages of 18 and 64 enrolled in the Minnesota Twins Registry were contacted by mail to participate in a questionnaire survey, which included: a modified Mayo Clinic Bowel Disease Questionnaire containing specific questions concerning IBS, the Eysenck Personality Index (EPQ) neuroticism score, and the Psychiatric Diagnostic Screening Questionnaire. **Results:** Complete questionnaires were obtained from 3048 (50.8%) twins, of whom 2122 were paired and 926 were single twins whose co-twin did not respond. This analysis concerns the 2122 paired twins, which come from 515 monozygotic and 546 dizygotic pairs of twins. Of these 2122 subjects, 255 (12.0%) fulfilled the Rome II criteria for IBS, and 175 (8.2%) had a psychiatric disorder (depressive, panic or generalised anxiety). Concordance rates for Rome II criteria were significantly greater for monozygotic twins (42 out of 132, or 31.8%) than for dizygotic twins (22 out of 123, or 17.9%), $X^2 = 5.9$, $p=0.016$, supporting a genetic contribution to IBS. Logistic regression analysis showed that for monozygotic twins, having a twin with Rome II criteria is a significant predictor of Rome II criteria in the index twin (Odds ratio = 3.32, 95% confidence interval 2.12 to 5.19, $p<0.0005$), after accounting for age, gender, neuroticism score and psychiatric disorder. Neuroticism ($p<0.0005$) and gender (odds ratio for females = 2.07, $p=0.003$) were also significant predictors. For dizygotic twins, however, having a co-twin with IBS was not a significant predictor of IBS in the index twin ($p=0.058$), but gender ($p<0.0005$) and neuroticism ($p=0.029$) were. **Conclusions:** Both heredity and psychological factors contribute to the development of IBS.

163 - THE ROLE OF PSYCHOLOGICAL DISTRESS IN WOUND HEALING: THE CASE OF DIABETIC FOOT

ULCERS *Vedhara K, *Tallon D, *Gale L, Dougan E, Strode A, Mudge L, Weinman J, Cullum N. *MRC Health Services Research Collaboration, University of Bristol, United Kingdom

Background: There is considerable evidence that psychological distress can influence the healing rates of experimental wounds in 'healthy' populations. The current study was designed to extend this work by examining the role of distress in the healing of diabetic foot ulcers. **Methods:** Prospective study involving patients with type II diabetes presenting with a foot ulcer. Baseline assessments are undertaken of ulcer size (i.e., length, width and depth of ulcer) and psychological distress (i.e., stress, anxiety and depression) and repeated at 6, 12 and 24 weeks. To date, 60 patients have been recruited. **Results:** Initial results from the first 22 patients recruited into the study (14 men, 8 women; mean age 65 years) have revealed considerable heterogeneity in ulcer size at baseline: length=2-50mm; width=1-40mm and depth=1-17mm. Patients were distinguished into those reporting low and high levels of stress, anxiety and depression (based on a mean split) and repeated measures ANOVAs conducted to explore the relationship between baseline levels on these distress measures and ulcer size by 12 weeks. For all analyses ulcer size was greater in patients reporting greater, stress, anxiety or depression, indicating poorer healing in these patients. For example, ulcer depth in patients reporting low anxiety was 0.95mm, compared with 3.12mm for those reporting high anxiety; for those reporting low depression =

1.5mm vs. 3.1mm (high depression) and for those reporting low stress = 0.85 vs. 3.27mm (high stress). **Discussion:** These preliminary results suggest that healing of diabetic foot ulcers may be influenced by psychological stress. Results of analyses performed on a greater number of patients and from the 24 week follow-up period will be presented.

173 - PSYCHONEUROIMMUNOLOGICAL ASPECTS OF CHRONIC DISEASES Vedhara K, Schmid-Ott G. University of Bristol, UK; Hannover Medical School, Germany

This symposium intends, in addition to pure psychoneuroimmunological research, to focus on different clinical aspects of the relation between psychoneuroimmunology and psychosomatic or behavioural medicine. Four relevant clinical fields in internal medicine and dermatology have been selected until now: psychoneuroimmunology and cardiovascular disease: glucocorticoid sensitivity of subjects with increased cardiovascular risk; psychoneuroimmunology and somatoform disorders of the gastrointestinal tract; role of psychological distress in wound healing: the case of diabetic foot ulcers and stress induced changes of cytokine levels of T lymphocytes in atopic dermatitis: a reanalysis considering IgE levels. In addition to the presentation of the various study results the intention of the symposium is to try to define common interests in clinical psychoneuroimmunological research of the joining colleagues of different European countries (UK, Switzerland and Germany). However, the symposium is open for contributions of further study groups in order to drive the discussion about the subject „Psychoneuroimmunology and Psychosomatic Medicine: Back to the Future“ (Kiecolt-Glaser et al. 2002) forward.

133 - THE PRISM-R: A PILOT-STUDY AMONG DIFFERENT PATIENT GROUPS Vingerhoets A. Tilburg University, Tilburg, The Netherlands

Büchi and Sensky (1999) introduced the PRISM as a nonverbal measure of suffering. A major advantage of this method is that it makes an easy comparison of the impact of different diseases possible. A disk representing the illness has to be placed in a rectangular representing the patient in his world. The distance between the disease and the self yields the Self - Illness Separation (SIS) measure. We tested a slightly revised version of the PRISM (PRISM-R), allowing the patients to choose the illness disk out of three sizes: smaller, equal to, and larger than the self, yielding an additional Illness Perception Measure (IPM). Participants were patients with the following medical problems: (1) lung disease (N = 32); (2) psoriasis (N = 59); (3) women with fertility problems (N = 42); (4) breast cancer patients (N = 59) and (5) whiplash patients (N = 29). Besides the PRISM-R data were collected on subjective health status, well-being, and quality-of-life (additional data in poster/ symposia). Patients groups differed significantly on IPM ($F = 6.63$; $p < .01$) and SIS ($F = 11.39$; $p < .01$). Significantly smaller SIS values were found in women with fertility problems compared to all other groups except for whiplash patients ($p < .01$). Smaller SIS values were also found in whiplash patients compared to patients with lung disease and breast cancer ($p < .01$). IPM was highest for whiplash patients and differs significantly from the other groups except for women with infertility problems ($p < .05$). These results suggest that women with fertility problems and whiplash patients experience a greater burden of suffering due to their illness compared to the other patient groups in this study. These preliminary findings suggest that the PRISM-R is a promising new tool to assess the subjective disease experience, yielding additional relevant information compared with traditional well-being questionnaires with the interesting possibility to compare among different patient groups.

289 - COMMUNICATION WITH LIVE ORGAN DONORS BEFORE LIVER TRANSPLANTATION: AN IN-DEPTH INTERVIEW STUDY Walter M^{1,2}, Papachristou C¹, Danzer G¹, Klapp BF¹, Frommer J³.¹ Clinic for Internal Medicine/ Psychosomatics, Charité Berlin, Berlin, Germany² Department of Psychiatry, University of Basel, Basel, Switzerland³ Department of Psychosomatic Medicine and Psychotherapy, Otto-von-Guericke-University Hospital, Magdeburg, Germany

The introduction of the living donation in organ transplantation enables appearance of important new psychological conflicts and

ethical questions in the transplantation process. Operation-related risks as well as dependencies in the family structure generate considerable pressure on potential donors. The aim of the study was to reconstruct the determinants of willingness to donate before transplantation. Our evaluation of 20 taped and transcribed interviews is oriented to current approaches in qualitative interview research. The approach used is based on grounded theory, qualitative content analysis, and the concept of the ideal type. Prior to surgery, "open motivated" donors push for an operation, leaving no room for ambivalence in the evaluation process. They idealise the relationship to the recipient, and link their donation with individual, partly in unconscious expectations and wishes. In contrast, "open ambivalent" donors formulate their anxieties and express arguments against donation. Statements that claim ambivalence towards the donation or utterance of arguments against donation, indicate coercion preceding donation. Before transplantation, potential donors should have an opportunity to discuss their emotional situation to enable their individual decision-making process.

145 - REPERTORY GRID BASED ASSESSMENT OF INDIVIDUAL STRESS CONCEPTS

Walter OB, Schmidt M, Fliege H, Rose M. University Medicine Berlin, Charite Campus Mitte, Clinic for Psychosomatics, Berlin, Germany

Even though the word stress is frequently used in everyday language, it is hard to establish clear cut definitions of what is stressful for an individual. There is, however, demand for a deeper understanding of the phenomenon stress, as medical professionals and lay persons alike often regard stress as a factor that causes illness or unfitness for work. To investigate individual stress concepts, a newly developed repertory grid approach was employed on N=50 psychosomatic in-patients. The approach can be described as a structured interview that can be analysed both quantitatively and qualitatively. Patients were asked to select at least 10 situations from a list of 27 potentially pleasant and stressful situations compiled from various stress questionnaires and theories. A special comparison technique of these situations yielded at least 9 bi-polar word pairs (constructs) for each patient. Similar to the semantic differential, the patients used their word pairs to rate the previously selected situations on a 7 point Likert scale. To assess the subjective understanding of stress, the individual selection of situations, word pairs, and rating matrices were analysed. Results were related to scores obtained from two stress questionnaires, the Perceived Stress Questionnaire (PSQ, Levenstein et al.) and the Stress Coping Questionnaire (SVF, Jahnke et al.). The majority of the selected situations were concerned with the private (71.3%) rather than the working life (28.7%) of the patients. Situations from private life related mainly to illness, conflicts within the family and illness or death of close relatives. Categorisation of the 439 word pairs by three investigators yielded 17 categories. The word pairs were most frequently assigned to the categories Tension (13.4%), Control (11.4%), Anxiety (9.1%), Joy (8.9%) and Support (8.3%). In contrast to patients with low levels of perceived stress (PSQ < 0.54), patients with high PSQ scores were found to use word pairs that were more often assigned to the categories Control and Anger and less often to the category Pleasure (all $p < 0.03$). Our results show marked differences in the individual perception of stress. From a diagnostic point of view, the stress grid can be used as a tool that facilitates the elicitation of therapeutic foci with respect to stress perception and coping. Moreover, our analysis of interindividual differences opens opportunities for the construction of stress questionnaires that are focused on the subjective understanding of stress.

303 - CARDIOVASCULAR REACTIVITY TO STARTLE STIMULUS DEPENDS ON AFFECTIVE CONTENT

AND AROUSAL Weber CS, Richter S, Wagner M, Schaechinger H, Deter HC. Department of Psychosomatic Medicine and Psychotherapy, Charité Campus Benjamin Franklin, Berlin, Germany.

Introduction: The startle reflex, usually assessed by the eyeblink reflex to a loud noise, represents a very basic and reproducible reflex. However, the strength of this reflex is modified by a subject's underlying psycho-neurological state. For instance, affective startle modification has been repeatedly demonstrated as assessed by EMG reactivity (Cook 1999). By contrast, it is not known whether there is a similar modulation of cardiovascular reactivity to startle. Therefore, our study set out to assess heart rate and blood pressure reactivity in subjects exposed to startle stimuli elicited in the context of different

affective dimensions. We hypothesized that negative pictures would elicit the strongest cardiovascular reactions. Methods: 80 healthy caucasian males were exposed to a series of 42 pictures from the International Affective Picture System (IAPS). The pictures varied in pleasure and arousal to differ between positive, negative and neutral affective content. During the picture series, acoustic startle probes (95 dB) were randomly administered over headphones during and between picture presentation. Orbicular eye muscle activity (EMG), heart rate (ECG) and blood pressure (Finapres) were continuously recorded. Results: As hypothesized, first results indicate a differential HR reactivity depending on the affective valence of the shown pictures. The highest reactivity was seen in response to negative affective content, followed by neutral and positive content. Less differential variability was found for systolic and diastolic blood pressure, i.e. pictures with both positive and negative content elicited blood pressure reactions. Conclusion: As hypothesized, our results regarding the differential HR reactivity pattern seem to accord with the published findings on EMG reactivity. By contrast, blood pressure reactivity obviously responds more to different states of arousal than to affective valence of picture content. However, our findings are preliminary and need further confirmation.

162 - THE IMPORTANCE OF DIFFERENT THERAPIES IN A PSYCHOTHERAPEUTIC DAY CLINIC

Joern von Wietersheim, Henrik Kessler, Department of Psychosomatic Medicine and Psychotherapy, University of Ulm, Germany

In the setting of a psychotherapeutic day clinic, the importance of various therapeutic elements for the patient, and their relationship to each other is not fully understood yet. To investigate these therapeutic elements and their relationship to each other, we asked 50 patients of the psychosomatic day clinic of the University of Ulm, Germany, to evaluate their different therapies by using a point system. The therapies offered were: Individual psychotherapy, psychodynamic group therapy, music therapy, art therapy, relaxation training, and social competence training. Every week while being treated at the day clinic, patients distributed 100 points among the various therapies. This system, with a total of 100 points each week, was designed to force the patients to choose carefully between therapies and avoid the well-known tendency of patients to give high scores to most of the therapies. The results show the dominating role of individual psychotherapy (mean 31 of 100 points) and group therapy (mean 17 of 100 points). We found a high variance, however, among the patients' preferences concerning special therapies such as relaxation training, which was given a very wide range of points by the patients. This observation, therefore, illustrates the importance of a multimodal concept, which offers a wide variety of therapies. In addition to these findings, data of a cluster analyses on typical preference patterns and typical developments during the day treatment will be presented.

142 - POSTTRAUMATIC STRESS DISORDER IN THE ELDERLY

Van Zelst WH, VU University Medical Center, Amsterdam, Netherlands

Introduction: this is the first population-based study on PTSD in older persons, investigated in an elderly community-based population (LASA study). Methods: PTSD cases were found following a two-phase sampling procedure: a random selection of 1721 subjects were screened and on 422 subjects a psychiatric diagnostic interview was administered. Prevalence of PTSD and subthreshold-PTSD was calculated. Also vulnerability factors regarding demographics, physical health, personality, social factors, recent distress and adverse events in early childhood were assessed, by comparing groups with PTSD, subthreshold PTSD, and a reference group. Consequences of PTSD were investigated as well, represented by indicators of well being (loneliness, selfperceived health and satisfaction with life), disability (bed-days and disability-days) and health care use (visits to the general practitioner, medical specialist, psychiatrist, mental care, social worker and receiving professional home care). Results: 6-month prevalence of PTSD and of subthreshold-PTSD was 0,9% and 13,1%, respectively. The strongest vulnerability factors for both PTSD and subthreshold PTSD were neuroticism and adverse events in early childhood. Consequences of PTSD tend to be severe. Subjects with PTSD or subthreshold PTSD more often spend days in bed due to illness or are limited in activities, even when correcting for other diseases or functional limitations that they have concurrently. Furthermore, they tend towards a negative attitude concerning life in general and received

help. Inadequate psychotropic medication and use of somatic care predominates. Conclusion: Comparisons with younger populations suggest only some accumulation of cases in older people reflecting the chronic risk factors (neuroticism and adverse events in early childhood), but a predominance of subthreshold PTSD. However, consequences of both PTSD and subthreshold PTSD are severe.

91 - FIRST RESULTS OF A PROGRAM FOR PATIENTS WITH „BINGE-EATING DISORDER

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Background: To date there is a lack of specific treatment programs focusing on both, obesity and eating disorders (Binge-Eating Disorder; BED DSM IV). Aim of this study (funded by the Medical Faculty, University of Heidelberg, Germany) was to systematically evaluate a new manualized multidimensional outpatient program for obese BED-patients. The 4 month program was based on cognitive behavioural therapy with an additional focus on interpersonal issues. In addition, counselling by a dietician as well as a supervised fitness program were also integrated. Method: Up to date N= 52 BED-patients with a BMI > 28kg/m² (n=42 female, n=9 male) were consecutively treated in 5 groups. The evaluation of the program covered a standardized psychological testing (e.g. SCID-I, SIAB, FEV, FKB-20), as well as a profound thorough somatic examination. For a detailed process analysis during treatment, electronic diaries were used. An age, sex and weight matched control group with no diagnosis of an additional eating disorder was recruited. Results: Mean BMI of BED-patients prior to intervention and obese control group was 37.3+/-5.9 vs. 35.3 ± 5.9 (p=n.s.). BED-patients showed significantly more restricted eating behaviour (p=0.029) and were more likely to report on eating forbidden foods (p=0.038). In addition, the BED group had a more negative body image (p<0.001). During the intervention, frequency of binges were reduced significantly (p<0.001, ES = 1.39) and aspects of body image improved. Although there was a significant reduction in body weight (p<0.001; ES = .94) BED patients still were markedly obese at the end of the intervention. Conclusion: Short-term results of our outpatient multidimensional program designed for obese patients with a binge eating disorder were promising. However long-term follow-up have to demonstrate the sustainability of the program.

Posters

233 - SPECIAL PSYCHOLOGICAL FEATURES IN FAMILIES OF CHILDREN WITH

HYPERVENTILATION SYNDROME Abalakina MV, Larkova IA., Briazgounov IP. Scientific Center of Child Health, Moscow, Russia

Aim: to determine are there special psychological features in families of children with hyperventilation syndrome (HVS) and whether they influence on the course of the illness. Patients: 30 children with HVS, aged 7-15 years, and their mothers were involved into trial. Methods: MMPI, Spielberg anxiety test, Varge-Stolin test (for the type of mother-child relations), interview with mothers. Results: According to the data of MMPI test hypochondriasis with hysteroid features was typical for children with HVS and it had been revealed in irritability, pessimistic attitude to life, passive attitude to the conflicts, avoidance from the decision of problems. We observed also absence of self-criticism, emotional immaturity, low self-control, immaturity of judgments, dependence from parents, suggestibility, impossibility of realizing high ambitions and high self-assessment which these children usually have results in anxiety with different somatic symptoms. As for mothers, they had the same personality type: hypochondriacal with hysteroid features with a lot of somatic complaints. According the Spielberg anxiety test they had high personality and especially situational anxiety. Interview with mothers discovered that the most of them suffered from hyperventilation. In spite of this, mothers usually supposed child breath problems to be not very actual. Mother-child relations were characterized by high level of symbiosis and social desirability. Mothers often tried to realize their own ambitions through the children. Symbiosis dominated in their relations and could induct

the child symptoms. So, we established that children with HVS and their mothers have similar personality type, similar behavior and special stereotype reactions. This group was very uniform. It seems obvious that there is a population in whom certain stressors provoke abnormal respiratory response. Perhaps, the special psychological features of affected persons could be either cause of HVS or simply have an influence on clinical course of HVS.

274 - ANXIETY AND DEPRESSIVE SYMPTOMATOLOGY IN PATIENTS WITH

CORONARY HEART DISEASE (CHD) Alevizos B, Papageorgiou C Alevizos E. Department of Psychiatry, Athens University, Eginition Hospital, Athens, Greece

There is a good evidence that patients with depression and anxiety are at increased risk for cardiovascular morbidity and that depression is more common among patients suffering from CHD. It is estimated that about 20% of subjects with angioplastic evidence of CHD and patients with recent myocardial infarction meet diagnostic criteria for major depression. In this study, general psychopathology, state and trait anxiety and depressive symptomatology were measured in 46 patients with CHD in comparison with 44 controls. The Langner's 22-items questionnaire measuring the general psychopathology, the Spielberger's state-trait anxiety inventory and the Zung depression scale were used as psychometric instruments. Patients with CHD scored significantly higher than controls in general psychopathology (p<0.000), in state and trait anxiety (p<0.000) and depressive symptomatology (p<0.002). Patients were also more frequently smokers (±2 = 9.82; p<0.01) and had lower physical activity (±2 = 4.15; p< 0.05) than controls. The results may indicate that anxiety and depressive disorders are common among patients with CHD and may constitute a risk factor, especially in association with other factors, such as smoking and low physical activity. Depressive disorders may remain undiagnosed and it is likely that they influence patients' compliance with prescribed medication and adherence to diet and exercise and could affect treatment outcome. Considering that the diagnosis of depressive disorder is predictor of major cardiac events, such as myocardial infarction and death, the potential for comorbid depressive disorder and anxiety in patients with CHD should be considered.

28 - THE RELATIONSHIPS BETWEEN PHYSICAL DYSFUNCTION AND PSYCHIC DISTURBANCES IN LOW BACK PAIN PATIENTS

Ancane G, Smite D. Riga Stradina University, Cesis, Latvia

Introduction. Chronic low back pain is an ever-upward problem in European countries. Despite different treatment methods, for approximately 30% of patients acute back pain turns into chronic pain syndrome, that accompanied by disability creates remarkable material damages to patients itself, to health care and to society overall. Due to increase of chronic back pain and disability caused by it, in Western countries since 20 years it is called the social epidemic (Nachemson, 2000), the cause of which has been related to cultural and psychosocial factors, as no relevant biological pathology changes are observed (Allan & Waddell, 1989). Goal. To study and analyse the relationships among musculoskeletal dysfunction, psychic disturbances and chronic pain syndrome in patients with chronic low back pain. Methods. Research was carried out at rehabilitation centre.

204 - IS FIBROMYALGIA SYNDROME A STRESS RELATED DISORDER? PSYCHOBIOLOGICAL

ASPECTS Anderberg UM. Department of Social Medicine and Psychiatry, Uppsala University, Sweden

There are many indications that fibromyalgia syndrome may develop from a range of different reasons. However, most of those reasons could be related to some kind of long term stress. Perturbations in the stress systems have also been seen in this syndrome as well as in other stress related disorders such as e.g. chronic fatigue syndrome and post traumatic stress disorder. The stress systems are also related to other neuroendocrinological systems that may alter levels and action in neurotransmitters or neuropeptides as in e.g. oxytocin, nociceptin and neuropeptide Y, which we have shown regarding a high frequency of stressful life events both in childhood and in adult age in these patients compared to healthy women. Furthermore, when the women rated their symptoms over the menstrual cycle, interestin pattern

emerge. Significant differences regarding pain, stress, other physical and psychological symptoms were found with more severe symptoms around the menstruation, when female sex hormones are low, compared to in the middle of the cycle, when the levels of estrogens are high. Compared to the healthy women, the women with fibromyalgia syndrome were more sensitive for the changes over the menstrual cycle, however, later studies have shown that women in general have lower thresholds for pain than men and that the pain threshold is at its highest point in the luteal phase when estrogen and progesterone are high.

93 - DEPRESSION AND ANXIETY IN

DERMATOLOGIC PATIENTS Aragonés TL, Marrón Moya, SE. Ernest Lluch Hospital, Calatayud, Spain.

Introduction: The aim of this study is to determine the incidence of anxiety and depression in skin diseases in the Calatayud Health Area. Previous bibliography on this subject reveals a link between anxiety disorders and/or depression and the appearance of certain skin diseases, as well as the aggravation and worsening of dermatological disorders, and in other cases merely another clinical condition to be taken into account. **Material and methods:** This paper is a transversal, observational study carried out on out-patients on their first visit to the Dermatology Department of the Ernest Lluch Hospital. These patients are referred to the Hospital by their general practitioners from the different Health Centres in the Calatayud area. One thousand patients were included in this study. Patients are asked to complete the Hospital Anxiety and Depression Scale (HADS) while waiting to see the Dermatologist. The doctor writes the diagnosis of the patient on the questionnaire as well as an assessment of the seriousness of the skin disorder (slight, moderate or serious). The doctor also completes a form with the socio-demographic data of the patient. This form reflects data such as age, sex, place of origin, marital status, profession, whether or not the patient is taking medicine or receiving psychological treatment for anxiety and/or depression, and a measure of disability in social relationships stemming from his/her skin condition on a scale of one to ten. The HADS has been chosen for its simplicity to answer and its shortness to complete. **Results:** The comorbidity between skin disorders and anxiety and depression in our survey is higher than 25%. The percentage of anxiety and depression among the general population is between 15 and 20%. Among patients with medical complaints the percentage is between 30 and 40%. Our results show a slightly lower figure. It was observed that the more serious the dermatological lesion, the higher the score on depression. Patients suffering from skin cancer were the ones who scored highest on depression. Noticeable unsightly skin diseases like hair loss or acne correlate the highest scores in anxiety, and at the same time they are the ones with the highest subjective rating for disability in social relationships. This study was meant as a form of screening, leading to further research and also as a means of devising specific programmes for complementary treatment.

252 - MALE RA PATIENTS WITH ALEXITHYMIA REPORT MORE SELF-EFFICACY AND BETTER PHYSICAL HEALTH

Arnstein Finset University of Oslo,

Norway

Background: Alexithymia is a stable trait characterised by a reduced ability to identify, differentiate and verbalise emotions. Alexithymia is found to be overrepresented among patients with chronic pain syndromes of different aetiologies. In some samples alexithymia has been more frequent among men than females, and alexithymia tends to be associated with more distress and reduced well-being. However, few studies have explored if the association between alexithymia and health related quality of life is different among male and female patients. **Method:** A cohort of 238 patients with rheumatoid arthritis (RA) was first examined less than 4 years after they were diagnosed with RA and followed up 1, 2, 5 and 10 years after initial examination. At the 10 year follow-up 147 patients (36 males and 111 females; mean age (SD) 60.0 (13.2) years; a response rate of 61.8 %) filled in questionnaires including Toronto Alexithymia Scale, 20 items version (TAS-20); SF-36; GHQ-20; Arthritis Self-Efficacy Scale and other questionnaires not reported here. **Results:** Mean (SD) alexithymia score was 51.7 (14.8); among males 50.7 (12.6) and females 50.3 (11.8). The difference was not significant. In relation to the case criteria (TAS-20 score > 60) 36.1 % of the male patients and 23.4 % of the females were classified as

alexithymic. The difference did not reach statistical significance. A series of two-ways ANOVAs were performed with gender and TAS case vs. non-case as factor variables and pain self-efficacy, SF-36 pain and SF-36 physical respectively as dependent variable. There were no significant main effects of gender or TAS caseness on pain self-efficacy. There was, however, a significant gender x TAS caseness interaction effect ($F=4.9$; $p < .05$), with higher self-efficacy scores for alexithymic men compared to non-alexithymic men and particularly compared to alexithymic females. There were borderline significant gender x TAS caseness interaction effects in relation to SF-36 pain ($p < .08$) and SF-36 physical ($p < .06$), both indicating a trend towards less pain and better health related quality of life among alexithymic men. **Discussion:** The paradoxical finding that alexithymic male RA patients report better self-efficacy and tend to report less pain and better physical health could either be due to a report bias (some men may downplay their symptoms) or reflect real differences in the way alexithymia affect males and females. These different interpretations will be elaborated and discussed.

239 - ACUTE PSYCHOLOGICAL STRESS CAUSES A REDISTRIBUTION OF MEMORY/EFFECTOR T CELL SUBSETS IN HUMANS

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Background: Adhesion molecules and chemokine receptors can be upregulated or lost as cells differentiate, allowing leukocytes to coordinate their migratory routes with their immunological differentiation state. It has recently been suggested that the pattern of expression of CD45RA and the lymph node homing receptor CCR7 divides human CD4+ and CD8+ T cells into distinct subsets. Both, the CD45RA+CCR7+ "naïve" as well as the CD45RA-CCR7+ "central memory" fractions, in search for antigen, circulate between the peripheral blood and lymphoid tissue. In contrast, CD45RA-CCR7- "memory effector" and CD45RA+CCR7- "terminally differentiated" effector T cells typically home into peripheral tissues in order to exert their effector function. **METHODS:** To test whether acute psychological stress might lead to a redistribution of memory/effector T cells within the peripheral blood, we performed a FACS analysis of peripheral T cells in nine test subjects undergoing a short laboratory mental stressor. In addition to analyzing surface markers, we intracellularly stained CD4+ and CD8+ T cells for the expression of the effector molecule granzyme B. **RESULTS:** We observed a decrease in the percentages of peripheral CD45RA+CCR7+ naïve and CD45RA-CCR7+ central memory cells in test subjects undergoing the laboratory stressor. In contrast, percentages of peripheral CD45RA-CCR7- effector memory and CD45RA+CCR7- terminally differentiated T cells increased following the mental stressor. In order to test whether this redistribution of different memory T cell subsets leads to an increase in functionally relevant effector cells in the periphery, we intracellularly stained the test subjects' T cells for the expression of the effector molecule granzyme B. We found a highly significant stress-induced increase in CD4+ and CD8+ T cells expressing granzyme B. **CONCLUSIONS:** Based on these findings we conclude that acute psychological stress specifically leads to a redistribution of naïve and different subtypes of memory T cells. In this scenario, the stressor causes a relocation of less differentiated T cells into lymphatic tissue in order to encounter antigen, while antigen-experienced effector-type T cells are mobilized into the peripheral blood in order to, in case of local inflammation, home to different peripheral tissues.

105 - "Psychological response and survival" - The prognostic value of the MAC-Scales with BMT patients

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Introduction: Watson et al. (Lancet 1999) found in women with breast cancer correlations between the Mental Adjustment to Cancer-Scale "Helplessness/Hopelessness" and the Hospital Anxiety and Depression Scale "Depression" with survival. We tried to replicate these findings in a sample of leukaemia patients undergoing BMT. **Methods:** Patients scheduled for BMT at the BMT-unit of Ulm (Germany) were administered the MAC and HAD Scales after

informed consent before conditioning for transplantation. Outcome was survival at two years post BMT. Results: 53 leukaemia patients (64,2% male) were recruited from 10/1999 to 12/2001. Only the MAC Scale "Avoidance" had a significant association to survival ($p = .041$; higher avoidance, better outcome) and HAD "Anxiety" showed a trend ($p = .098$; higher anxiety, poorer outcome). After controlling for somatic risk factors, no association was significant. Conclusion: The failure of replication in our sample may depend on small sample size, gender, or the time of measurement. The prognostic value of the MAC-Scales may not be given for other diagnoses than breast cancer and needs further investigation.

102 - MARITAL STRESS AS AN INDEPENDENT FACTOR OF HYPERTENSION

Piroska Balog, Eszter Meszaros, Maria S. Kopp, Institute of Behavioral Sciences, Semmelweis University, Budapest, Hungary.

Objectives: The aim of this study was to investigate the association between marital status and history of hypertension, when traditional risk factors and marital stress are taken into consideration. **Methods:** Data were obtained from the Hungarostudy 2002, a national representative study: 12668 persons were interviewed, representing the Hungarian population over the age of 18, according to age, sex and county. Questions referring to marital status, age, education, BMI, smoking habits, alcohol use, physical training, coffee intake and history of hypertension (treated with hypertension formerly, last year as an outpatient and last year in hospital, medication and number of disability days due to hypertension) were included in the survey. Marital stress was measured by the shortened version of the Marital Stress Scale (Orth-Gomer K, 2000). **Results:** In relation with marital status, married people with high marital stress had the highest mean of disability days due to hypertension (3,29), when the effects of age, sex, education, BMI, coffee intake, smoking habits, alcohol use and frequency of physical training are taken into consideration. They differ significantly from those who are living alone (1,14, $p = 0,03$) and from those who have a good marriage (with low marital stress) (1,36 $p = 0,01$) who had the lowest mean of disability days due to hypertension. The mean of disability days due to hypertension for those who are living in stressed marriage (although not significantly) is even worse than for those who are divorced or who loosed their spouses. **Conclusion:** Marital stress has a powerful effect on hypertension, independently from traditional risk factors.

241 - THE ROLE OF SPIRITUAL HISTORY AFTER ACUTE MYOCARDIAL INFARCTION IN THE HUNGARIAN POPULATION

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Background: Rehabilitation of patients with coronary artery disease in Hungary is still a major public health problem. Psychological and spiritual assessment might improve their prognosis and quality of life. **Aim:** Examining correlations between religiosity (practice and importance) and psychological, social factors among patients after myocardial infarction. **Methods:** We analysed the data of the Hungarostudy 2002: 12668 subjects representing the Hungarian population according to age, sex and county were interviewed. 276 post-infarct patients were identified. Spirituality was assessed by the importance of religion (no-little-very important-influencing all activities) and according to belief and church-attendance (non believer/ non practising/ practising on their own way/ goes to church rarely/ goes to church regularly). Linear regression models were built. After controlling for age, sex, level of education and annual income (1. model) belief and church attendance was added (2. model). Dependent variables showing significant correlations with importance of religion were regressed on this additional variable, too (3. model). **Results:** Taking non-believers as a reference group regular church attendants showed a tendency for higher sense of coherence ($p = 0,07$) and significantly higher social support scores. Sense of coherence was found higher in the group practising religion on its own way ($p = 0,04$) and in those going to church rarely ($p = 0,05$). Those going seldom to church had higher value on the positive affect scale ($p = 0,009$), with a tendency of less sensation seeking ($p = 0,06$). The group practising religion on its own way showed a significantly higher value in BDI ($p = 0,008$), vital exhaustion ($p = 0,02$), hopelessness ($p = 0,05$) and sleep disturbances ($p = 0,02$). Problem oriented coping was more dominant in the group attaching little importance to religion ($p = 0,05$), than among

those finding it of no importance. **Conclusions:** Spiritual history about beliefs and practices might shed light on essential factors that play a vital role in the rehabilitation of patients after myocardial infarct. We would stress the significance of identifying patients practising religion on their own way. They may constitute a high-risk subgroup possibly having poorer quality of life and outcome.

135 - COMPARING COMPUTER-ASSISTED INTERVIEW DIAGNOSES TO CLINICAL

JUDGEMENT Becker J. Department of Psychosomatic Medicine, Charité Berlin, Germany

The purpose of the study was evaluating the application of a computer-assisted standardized interview (CIDI) to psychosomatic patients and exploring the prevalence and comorbidity of mental disorders as diagnosed by this interview and by clinical judgment. The standardized Composite International Diagnostic Interview (CIDI) is applied to $n = 230$ inpatients being routinely diagnosed by experienced clinicians and treated at the Department of Psychosomatic Medicine, Charité Berlin, between 11/02 and 11/03. The CIDI is a fully standardized computerized diagnostic interview designed for assessing mental disorders according to the definitions of the ICD-10 and DSM-III-R. Prevalence and comorbidity of mental disorders are investigated by descriptive statistics, diagnostic concordance between both diagnostic strategies (CIDI and clinical diagnoses) is explored by diagnostic sensitivity, diagnostic specificity and by kappa statistics. Most frequent disorders as assessed by clinicians and by the CIDI are depressive and somatoform disorders. Whereas the CIDI diagnoses more frequently anxiety disorders and proves well in diagnosing post-traumatic stress disorders, it shows difficulties in differentiating between different types of somatoform disorders, dissociative and adjustment disorders. Clinicians tend to diagnose more often adjustment disorders and different types of somatoform, eating and psychoactive dependence disorders. Both strategies reveal high comorbidity concerning depressive, anxiety and somatoform disorders. Because overall concordance between CIDI diagnoses and clinical judgment is only moderate, we hope for discussions on the appropriateness of the application of fully standardized computer-assisted interviews in the psychosomatic context and / or possible improvements in this field.

279 - THE VIEW OF PSYCHOTHERAPISTS?

Bell K. Disease Management programs for chronic illnesses have become an integral part of German health care systems. The participants of the symposium are representatives from the political area and from the self administration of physicians and the statutory health insurances (SHI). They will discuss the importance of integrating psychosomatic perspectives and contents into the programs and how this can be done.

158 - RESULTS OF THE PROSPECTIVE PSYCHOLOGICAL EVALUATION FIVE YEARS

AFTER SURGICAL OBESITY THERAPY Benecke A, Schowalter M, Hoog C. Institute of Psychotherapy and Medical Psychology, Würzburg, Germany

At the university of Würzburg every patient requesting a gastric banding operation is examined psychologically (t1) since May 1997. This exploration is part of the selection process to which also belong internal and surgical examinations. Five standardised questionnaires are used during the psychological diagnostic process: Beck Depression Inventory (BDI), one questionnaire referring to self-acceptance (SESA) and one to contentment with life. The Three Factor Eating Questionnaire and the Inventory of Eating Behaviour and Weight Problems describe several patterns of eating behaviour. With every patient two anamnestic explorations are performed. Six months (t2), two years (t3) and five years (t4) after the operation these tests plus a self constructed questionnaire which gives information of specific changes in eating behaviour (especially after gastric banding), social contacts and other aspects are sent to the patients. Since June 1997 until October 1999, 100 patients (80 women, 20 men, age between 20 and 59 years, body mass index (BMI) between 33,0 and 69,2 kg/m²) were examined. 19 persons were excluded from the operation, 62 were operated and 13 persons were agreed to be operated under certain conditions, for example accompanying psychotherapy. Five years after the operation we received data from 25 patients so far. BMI decreased significantly from 47,8 (t1) to 37,4 (t4) ($p < 0,001$, t-Test), depression

from 13,9 (BDI (t1)) to 8,6 (t4), ($p < 0,05$, t-test) while self-acceptance increased (SESA (t1) = 103,5; t4 = 111,0; $p < 0,05$). Control of eating behaviour also increased (FEV t1= 9,22; t4 = 12,1; $p < 0,05$) as did feelings of hunger (t1 = 7,4; t4 = 11,4; $p < 0,05$), and disinhibition tended to decrease (t1 = 8,0; t4 = 6,4; $p = 0,051$). Altogether the results show improvements in many psychological and eating behaviour parameters. The increase of feelings of hunger is astonishing and is partially due to some patients who show extreme values of hunger and little weight loss. The extent of mean weight loss was expected.

263 - BODY-IMAGES IN PATIENTS WITH EATING DISORDERS AND THEIR FAMILIES: A COMPUTER ASSISTED APPROACH Benninghoven D, Jürgens E, Kunzendorf S, Jantschek G. Department for Psychosomatic Medicine, University of Schleswig-Holstein, Campus Lübeck, Germany

Background: Eating disorders are associated with distorted perceptions of the own body. So far body-image distortions have mostly been assessed by questionnaires or by selecting drawn silhouettes of body-images also in a paper pencil form. In this study we investigated whether a computer assisted approach to the assessment of body-images in patients with eating disorders and their families could be suitable for research questions and for therapeutic purposes. **Method:** A computer program is presented that allows modelling body-images from different perspectives: how a person perceives her- or himself, how a person wishes to appear, how a person thinks that an average person of her or his age appears and what kind of body-image would be mostly attractive for a person with the opposite sex? The program also allows to assess body-images not only from patients themselves but also from family members and partners. Family members and partners are asked to select their own body-images and the images they have from their eating disordered family member. The selected body-images are compared with standardised questionnaires (EDI, IIP, BDI etc.) and with anthropometric data (body composition, bmi etc.). So far data from 50 patients (30 patients with anorexia and 20 patients with bulimia nervosa) and 30 control subjects have been analysed. **Results:** Neither the patients nor their family members reported any problems with handling the program. Preliminary analysis of the data shows that patients with anorexia highly overestimate their body fat. Patients with bulimia nervosa perceive their body-image more accurate. Normal control subjects tend to slightly underestimate their body-image. Mothers of patients with anorexia nervosa highly overestimate their own body fat whereas mothers of patients with bulimia nervosa perceive their body-image accurate. An overestimation of ones own body-image is also associated with less satisfaction with the own body-image. **Discussion:** The computer assisted approach seems to be suitable for the assessment of a most important criterion for the diagnosis of eating disorders. The data from family members seems to validate the impressions family therapists reported from their work with families of patients with eating disorders.

124 - ALEXITHYMIA RELATION TO INCREASED SYMPATHETIC ACTIVITY OF AUTONOMIC HEART RATE CONTROL Beresnevaite M, Raugaliene R, Vasiliauskas D, Krisciunas A, Grizas V, Leimoniene L. Institute of Cardiology, Kaunas University of Medicine, Cardiac Rehabilitation Laboratory, Kaunas University of Medicine Institute of Cardiology, Clinic of Rehabilitation, Kaunas Medical University Hospital, Kaunas, Lithuania

Alexithymia relation to increased sympathetic activity of autonomic heart rate control: are the alexithymic patients after coronary angioplasty at higher risk of sudden cardiac death? **Aim:** It is known that abnormal autonomic heart activity plays an important part in the development of sudden cardiac death. Our aim was to research if alexithymia is related to the increased sympathetic activity in coronary heart disease (CHD) patients after percutaneous transluminal coronary angioplasty (PTCA). **Methods:** 41 CHD pts (33 men and 8 women aged 58.0 \pm 9.0) after PTCA were investigated. Alexithymia was assessed by using 20-item Toronto Alexithymia Scale (TAS-20). Spectral heart rate variability (HRV) was expressed as low-frequency (LF) component (a marker of sympathetic modulation); high-frequency (HF) one (as a marker of parasympathetic activity); LF/HF ratio and heart rate reaction (DltRRb) to active orthostatic test (AS LF/HF ≥ 1.1 and/or DltRRb ≥ 200 ms show increased sympathetic

activity. Data were analysed using t-tests, chi-square tests and multiple regression analysis. **Results:** This study demonstrates that 90% of pts had increased sympathetic activity. T-tests and chi-square tests didn't show the differences of parameters of heart rate variability in alexithymic and non-alexithymic pts. The results of multiple regression analysis have shown that LF component is related to TAS-20 score ($b = 0.789$; $p = 0.038$; 95%CI 0.052-1.625). There were small number of pts in this study, so we suggest, that alexithymia association with increased sympathetic activity could be confirmed by other parameters of HRV (LF/HF ratio, DltRRb) by larger studies. **Conclusion:** The findings of this research suggest that TAS-20 score is related to LF component of HRV in CHD pts after PTCA. It is possible that alexithymic patients after PTCA are at higher risk of sudden cardiac death. It would be important for the rehabilitation programmes for these pts. Further studies are required for the confirmation of the alexithymia relation to the risk of sudden cardiac death in CHD pts after PTCA.

208 - FIBROMYALGIA AND FACIAL EXPRESSION

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Background and aim: Relationship patterns of Fibromyalgia (FM) patients are often characterised as difficult. It is assumed that patients with mental diseases implement a specific interaction pattern, that is expressed in the facial expression and particularly in facial-affective micro-behaviours. The aim of the present study was the analysis of facial-affective behaviour of inpatient female FM-patients in comparison to healthy women. **Methods:** Videotaped psychodynamic interviews of each 15 inpatient female FM-patients and healthy women (absence of mental/psychiatric disorder according to ICD-10) were coded using the Emotional Facial Acting Coding System, an instrument for the registration of facial movements with emotional relevance. Afterwards these analysis were connected with gazing behaviour. **Results:** FM-patients showed neither a reduction of overall facial expressions nor a reduced frequency of facial affects in comparison to healthy women. Healthy women however showed significantly more "genuine joy" and a reduced portion of "contempt" than patients did. Taking the gazing behaviour into consideration it became obvious, that FM-patients expressed a significantly reduced portion of "genuine joy" and a significantly increased portion of "contempt" during phases of mutual gaze compared to healthy women. **Conclusions:** The difficulties in establishing a positive relationship with FM patients are somewhat clarified by these results: on the one hand is the non existing reduction of overall facial expressions, and thus the affective "vividness" contrary to the detailed descriptions of complaints, on the other hand it became obvious, that at the same time elements stabilizing a relationship are missing and dissociating ones are implemented.

10 - SYCHOTHERAPY WITH REFUGEE TORTURE SURVIVORS – TRAUMATIC PROCESSES AND DIFFERENT CULTURAL BELIEFS Birk A. Berlin Center for the Treatment of Torture Survivors, Germany

The Berlin Center for the Treatment of Torture Survivors has acquired 11 years experience of diagnostic and therapeutic work. As a result of severe and repeated traumatizations on the one hand and ongoing uncertainty and stress in exile on the other hand, the survivors suffer from complex posttraumatic disorders with a high tendency of chronification. In Germany, refugees live in a social and legal situation, which is characterized by repeated stress and severe restrictions. The helplessness stemming from this situation is a further traumatizing factor for victims of war and persecution (third phase in the sequential traumatization process). The individual traumatic process and the clinical symptoms are influenced by the experiences which follow the former traumatic events. When trauma survivors are faced with further stressors and with public denial of trauma, posttraumatic symptoms and clinical disorders often deteriorate. Psychotherapy with refugees is mostly a cross-cultural relation. Most people are unaware about the influence of their own culture and take their beliefs and behaviours as ☐normal☐. The presentation focuses on common cultural biases, which may be present in mental health professionals. E.g. most psychological theories suggest that people grow from dependence to independence and that mature functioning implies autonomous thought and behaviour. An alternative suggestion, which may be more appropriate for many refugees is that maturity involves growth toward connection and relationship. Many of our patients (e.g. Kurds or Bosnians from rural areas) come from cultures where relatedness to others is

important, where status and authority are politely respected and where the goals of the group (family, community etc.) are more important than individual ones. Therefore, every person should act according to collective norms. Conformity and harmony are necessary and conflicts are avoided. This implies also culture specific resources as it has been shown that strong social support following trauma (implying some degree of dependency) is essential to prevent further difficulties with trauma-related disorders. Examples how to establish a common understanding of the problem and the cure are discussed.

168 - HEALTH ANXIETY, HEALTHCARE UTILIZATION AND SOMATIZATION AMONG OUTPATIENTS IN CBT

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Health anxiety (HA) refers to health-related fears and beliefs, based on interpretations of bodily signs and symptoms as being indicative of a serious illness. Health Anxiety is understood as a continuum with the severe end of it representing hypochondriasis. In order to gain information on the prevalence of HA among outpatients in cognitive-behavioral therapy (CBT) as well as to ascertain characteristics of patients with high HA, a sample of 111 patients of an ambulatory cognitive-behavioral practice was screened with the Illness Attitude Scales, the Screening for Somatoform Symptoms and the Symptom Checklist SCL-90-R. Additionally, all patients underwent a semistructured interview pertaining to DSM-IV. Although 31% of the patients could be categorized as high HA patients, only three of them (2.9%) met criteria for DSM-IV hypochondriasis. Further results show that high HA patients suffer from much more somatoform symptoms than the rest of the subjects ($p < .001$, Cohen's $d = .76$). High HA individuals had higher scores on almost all SCL-90-R subscales as well as on the the global symptom index GSI ($p < .01$, $d = .76$). There was a high rate of visits to the doctor with a mean number of 24 visits per year for high HA patients (compared to 11 visits for low HA patients; $p < .01$, $d = .91$). Interestingly, the number of visits to the doctor correlates higher with HA ($r = .34$, $p < .01$) than with the number of somatoform symptoms ($r = .26$, $p < .05$). These results signalize that health anxiety can be held responsible as one important factor accounting for the high health care costs in Germany. Although hypochondriasis as a mental disorder seems to be relatively rare in the CBT outpatient setting, health anxiety plays an important role for about one third of patients in psychotherapy.

243 - DANCE/MOVEMENT THERAPY AND CHANGES IN STRESS-RELATED HORMONES: A STUDY OF FIBROMYALGIA PATIENTS

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Abstract: Little is understood how dance/movement therapy affects patients with fibromyalgia (FMS). This study describes the measurement of stress-related hormones (Cortisol in plasma and in saliva, Prolactin, DHEA-S, NPY and Oxytocin) in FMS patients in relation to Dance/movement therapy (DMT). Can it be possible to see corresponding changes in stress-related hormones and movement patterns after six months of DMT (20 patients) compared to controls (816 patients)? After eight months of follow-up after DMT there were increasing levels of cortisol both in plasma and in saliva, which may indicate a activation and/or revitalization of the HPA(hypothalamic-pituitary-adrenal)axis in the treatment group. The treatment group also changed their mobility, movement pain and life energy significantly to the better compared to the controls measured by video-interpretation. There was a discrepancy between lacks of significant changes in blood concentration of hormones and the significantly improved function reported by the patients' interpretation of the videos after 14 months. The body speaks its own language and is probably more alert in signalling changes over time, before changes are evident in inner biological hormonal systems after DMT. The video interpretation technique could be used as an important method in predicting pre-stress related body signals after DMT and in helping patients to deal with both chronic pain and dormant stress-related symptoms.

167 - ATTITUDES AND ARGUMENTS OF INFERTILE COUPLES TOWARDS ADVANCES IN REPRODUCTIVE TECHNOLOGY

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Objectives: Based up to the contemporary discussion about the psychosocial consequence of modern reproductive technology we have investigated the attitudes of infertile couples about preimplantation genetic diagnostic (PGD), embryo selection and screening, psychological and ethical dilemmas raised by advances in reproductive technology and their consequences for family and kinship relations. **Methods:** 100 infertile couples who attended the Infertility Center Berlin were given a questionnaire which ascertained the attitudes about PGD, embryo selection and screening, psychological and ethical dilemmas raised by advances in reproductive technology and their consequences for family and kinship relations. In addition interviewer-administered survey were used to explore the strategies of argumentation of 20 infertile couples. The intention was to analyse the general and specific attitudes as well as the corresponding arguments towards this subject by infertile couples. Therefore we have analysed quantitative the questionnaires and qualitative the interview data by Grounded Theory. **Results:** Most respondents expressed the desire to legalize and to use PGD, embryo selection and screening to prevent disease and handicap. Couples who undergo treatment for infertility shows little concerns about negative consequences by using testing technology for family and kinship relations. But they are well aware of the psychological and ethical dilemmas raised by advances in reproductive technology. Furthermore to seek predictive testing technology demands accounts. Certain interview sequences are presented to show some typical statements of infertile couple, who want to legalize PGD, embryo selection and screening. The decision to use predictive testing is driven by the desire of autonomy. In addition the interview data show two other categories "prevention of disease" and "responsibility" which were discussed by the couples.

122 - SELECTIVE MONOCYTE AND GRANULOCYTE Apheresis AS A POSSIBLE NEW TREATMENT FOR CHRONIC FATIGUE SYNDROM

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INTRODUCTION: Immune dysfunction in patients with chronic fatigue syndrome (CFS) has been widely reported, and in some patients you may find cytokine abnormalities that include perturbations in plasma levels of proinflammatory cytokines and decrease in the ratio of Type 1 to Type 2 cytokines produced by lymphocytes in vitro. Selective monocyte and granulocyte apheresis (M-GCAP) is a device that is approved for treatment of certain immune disorders in Europe and Japan, and the treatment has been shown to normalize cytokine imbalance and improve symptoms in disorders as inflammatory bowel disorders, rheumatoid arthritis, Bechet disease and cancer. Many CFS patients do not respond to medical or behavioral therapy, and new treatment options are needed for the severely affected patients with chronic disability. **OBJECTIVE:** The primary objective was to evaluate therapeutic efficacy of M-GCAP in patients with CFS. The secondary objective was to assess abnormalities in cytokine balance and changes in these markers after treatment. **METHODS:** We aim at including patients with CFS assumed to be related to a previous infection. The patients do not have major psychopathology explaining the symptoms. All will be nonresponders to different treatment efforts. M-GCAP is performed by using 335 mL capacity column (Adacolumn) containing 220g cellulose diacetate beads of 2 mm in diameter as the column adsorptive carriers. Each patient receives one M-GCAP session per week for five consecutive weeks. The duration of one M-GCAP session is 60 minutes, flow rate 30 mL per minute. The outcome of the treatment is assessed 2 weeks and 7 weeks after the end of treatment. Changes in chronic fatigue symptoms measured by Chronic Fatigue Scale and somatic symptoms is the primary efficacy variable. **RESULTS AND COMMENTS:** Clinical observation and assessment of vital signs (heart rate, blood pressure, and body temperature) for the first 4 patients (January 2004) indicated that the patients showed greater autonomic instability than other patient groups that have received this treatment. The study still recruits patients. The results regarding clinical improvement and cytokine balance alterations of the whole group will be presented at the meeting.

234 - USE OF HYPNOSIS FOR TREATMENT OF TĀ BEDWETTING Briazgounov IP, Kizeva AG, Mihajlov AN. Center Scientific of health of children, Moscow, Russia

There is a set of the explaining reasons concerning etiology of the Bedwetting (BW). Central of them it is possible to allocate a role of dream. A number of authors specify interrelation Bedwetting and rhythms of dream - change of slow and fast phases. The purpose of the present research was the establishment as the help of hypnosis, to reach at children such physiological and psychoemotional functioning that they could be drawn in independently at night in a toilet for emptying a bladder. For development of such functional and behavioural skill the policy of a trance which is understood by us as such mental process as a such concentrated attention to the significant text with immersing the child in hypnotic state was followed. Amount of children of the boys and girls with BW – 26; control groups (cephalgia - 24, long-term subfebrile temperature – 24). Preliminary at children before a rate of a trance it was carried out psychodiagnostic tests: 1) definition of a degree of suggestibility; 2) definition individual hypnotizability; 3) definition on 11 parameters dynamic.

141 - THE COMPREHENSIVE BODY EXAMINATION (CBE) Bunkan BH. University college of Oslo, physiotherapy education, Oslo, Norway

Comprehensive Body examinations have been used to assess patients with pain in the musculo-skeletal system, various types of psychosomatic diseases (asthma bronchiale, anorexia nervosa, migraine, dizziness) and psychiatric diseases (psychoses and personality disorders). The central question has been: Is it possible to obtain reliable measurements for body posture, respiration, movements and muscular consistency and do these measurements discriminate between Non-patients and patients? Ninety nine individuals (Non-patients, Patients with pain of long duration, Patients with psychoses) were examined. The data were analysed by factor analysis, internal consistency, t-tests and ANOVA for differences between groups. The results showed 14 sub-scales: 2 for body posture, 5 for respiration, 3 for movements and 4 for muscular consistency. Nine sub-scales discriminated between Non-patients and Patients with psychoses, 4 sub-scales discriminated between Non-patients and Patients with pain of long duration, and 1 sub-scale discriminated between the patient groups. The findings showed that the Patients with psychoses had more deviating body features than the Patients with pain of long duration. The domains Body posture and Muscular consistency showed that the extremities and shoulders can convey one type of information and the rest of the body another. Thus the back can have hard muscular consistency while the extremities can have too slack. Such consistencies should be treated differently. Two sub-scales: Changeability of respiration and Resistance to passive movements counted for 97 % of the variance in the material and gave as much information about the degree of disease as the 14 sub-scales together. The variance within the groups was greater than the variance between the groups. Both the global sum-score and the domain scores discriminated between Non-patients and the patient groups. The 14 new sub-scales showed systematic body features which offer an improved base for treatment. The reliability of the study was very good.

15 - POST STROKE DEPRESSION Carter AC. St. Charles Hospital and Rehabilitation Center, New York, USA

Stroke is a leading cause of morbidity and mortality. In the United States, stroke is the third leading cause of death and is second only to arthritis as the most common form of disability. Disabilities seen after stroke include: cognitive deficits, motor weakness, and depression. Post stroke depression is a common disability, and is seen across cultures, age groups and sexes. The incidence of post stroke depression is estimated to range between 20-60% of stroke survivors. Additionally, depression is seen not only in stroke survivors but in their primary care givers as well. Studies place the incidence of depression in primary care givers of stroke survivors of up to 50%. Stroke patients with depressed care givers have markedly diminished function return. Further studies demonstrate that patients with post stroke depression have poorer functional and cognitive recovery than patients not affected. Common measures used to rate post stroke depression include: the Beck Depression Index, the Hamilton Depression Rating Scale, the Geriatric Depression Rating Scale. While there is still debate as to the pathophysiology of post stroke depression,

there exist many effective treatment options for post stroke depression including cognitive based psychotherapy and various antidepressant medications. In order to help to improve the patient's self image, every effort should be made to improve his physical function. The Psychiatrist and the rehabilitation team can play a significant role. To assure optimum functional recovery from stroke, it is important that the diagnosis of post stroke depression not be neglected and that a team approach be employed, thus providing both physical and emotional support.

211 - ON THE ASSOCIATION BETWEEN COPING STRATEGIES AND MENTAL HEALTH IN WAR: A LONGITUDINAL INVESTIGATION Cavka M, Joksimovic L, Schmitz N, Prorokovic A, Ehler U. Psychosomatic Medicine, Heinrich-Heine University Duesseldorf, Germany

The present study investigated the use of coping strategies in war and post war period in Croatia among three groups (n=480) differently exposed to the war stress and their effect on anxiety, somatic and depressive symptoms, during the war in 1993 (time 1), immediately after the end of the war in 1995 (time 2) and a last one five years later in 2000 (time 3). Participants: civilians (n=160), refugees (n=160) and soldiers (n=160) completed questionnaires that included demographic data, psychosomatic complaints, Endler's Coping Inventory for Stressful Situation CISS, Beck's Depression Inventory (BDI), Endler's Multidimensional Anxiety Scales-State (EMAS-S). The results showed that most used coping strategy during the war for all three groups was emotional oriented coping. At measurement time 2 and time 3, civilians showed the highest scores at the problem oriented subscale, while refugees and soldiers scored high on both, emotional oriented coping and problem oriented coping. Higher usage of emotional and avoidance coping strategy were related to higher level of psychosomatic and depressive symptoms in the long term.

225 - SUCCESSFUL TREATMENT OF ANOREXIA NERVOSA WITH A COMBINATION OF MIRTAZAPINE AND FLUVOXAMINE Conrad R, Liedtke R. Department of Psychosomatic Medicine and Psychotherapy, Bonn, Germany

Objective: To document a case of pharmacotherapeutic treatment of anorexia nervosa with the combined use of fluvoxamine and mirtazapine, and to discuss the pharmacodynamic and pharmacokinetic interactions. Case Summary: A 40-year-old woman with a 6-year history of anorexia nervosa was being treated with psychotherapy. In combination with psychotherapeutic treatment several antidepressants were prescribed successively. At last a medication of mirtazapine was given for 6 month without a significant improvement of symptomatology. After fluvoxamine was added to this medication, the patient could rapidly gain weight (from 45 to 53kg) and she reported a significant improvement of mood. In the following months she could keep her weight (up to the present day) and accept the associated bodily changes more easily. As a side effect she suffered from skin rashes, which disappeared after three month of dermatological treatment. Discussion: The possible causes of this favourable treatment outcome are discussed, including the effects of fluvoxamine and mirtazapine alone and the possible pharmacodynamic and pharmacokinetic interactions of these two drugs. Conclusions: Up to the present day pharmacotherapeutic treatment of anorexia nervosa is unsatisfactory. Little is known concerning the effect of the combined use of antidepressant agents on anorexia nervosa. We describe a case in which the combined use of antidepressant agents leads to a better outcome. If these agents are prescribed concomitantly, clinicians must be aware of possible interactions that could lead to serotonin syndrome and they must be able to recognize serotonin syndrome, which is associated with tremors, restlessness, twitching, flushing, diaphoresis, and nausea.

229 - PSYCHOSOCIAL DISTRESS AND STRESSFUL LIFE ANTECEDENTS ASSOCIATED WITH SMOKING Consoli SM, La Rosa E, Le Clésiau H, Soufi K, Lagrue G. Department of C-L Psychiatry Georges Pompidou European Hospital, Paris, France

Objective: To explore the respective contribution of psychological factors and stressful life antecedents during childhood and adolescence of adult smokers. Methods: 2315 consecutive subjects, aged 16 to 59, consulting for a free work-up in a preventive health centre, supported by the National French Health insurance system, were invited to fill out a series of questionnaires: the GHQ-28 and the LOT, respectively measuring psychosocial distress dispositional optimism, as well as a

questionnaire on socio-demographic, socio-economic and biographical data. Results: 78.1 % complete records could be analyzed : 870 subjects (48 % of the studied population) declared a current tobacco consumption of at least one cigarette/day and were defined as the group of "smokers" (55.5 % males and 45.5 % females ; mean age 37.7 ± 10.7 years) and 939 (51.9 %) declared not to smoke. Compared to the non-smokers, smokers were characterized by a higher percentage of males, an older age, a lower educational level and a lower income level; they also more frequently presented the socio-economic criteria of precariousness (all $p < 0.001$, excepted for age, where $p = 0.006$). Smoking was also associated with higher levels of psychosocial distress, as assessed by GHQ-28, especially for the depressive mood and anxiety components of the questionnaire ($p < 0.001$), and with lower levels of dispositional optimism ($p < 0.01$). As regards biographical data, smokers were characterized by a way of life marked by financial difficulties, a reduction of social contacts, and a higher frequency, before the age of 18, of a divorce or a separation of the parents ($p = 0.002$), frequent parental quarrels ($p < 0.001$) or a separation from the parents ($p < 0.001$). The presence of a depressive mood at GHQ-28 as well as frequent parental quarrels remained independent risk factors for smoking in a multiple logistic regression (Odds Ratios respectively of 1.61, 1.34), after controlling for gender, educational level and the notion of socio-economic precariousness. Conclusion: These results highlight the complementary role of socio-economic, psychological factors and certain stressful life antecedents among the determinants of smoking and should be taken into account for tailoring smoking cessation programs.

311 - PREVALENCE OF DEPRESSION AMONG INTERNAL MEDICINE INPATIENTS AT A GENERAL HOSPITAL. PRELIMINARY RESULTS Cordero A, Conejo A, Lozano M, Ramos-Brieva J, Ochoa E, Saiz J, Sabán J. Services of Psychiatry and Internal Medicine. Hospital, Madrid, Spain

Introduction: According to different epidemiologic studies, depression is a frequent disorder among internal medicine inpatients. We hypothesized that a high proportion of these patients are discharged without their depression being identified. The presence of this disorder negatively affects the course of their somatic disease and increases health care costs. **Material and Methods:** Randomly selected internal medicine inpatients hospitalized for at least five days in a period from November 2003 to February 2004 were interviewed at the time of discharge. During the screening phase we used the Mini-Mental State Examination to exclude cognitive disorders, the CAGE questionnaire to discard alcoholism and the Hospital Scale for Depression and Anxiety to identify possible affective cases. Patients with other psychiatric disorders were excluded from the study. During the second phase, we used the Standardized Polyvalent Psychiatric Interview (S.P.P.I.). This well-established structured clinical interview uses ICD-10 to diagnose depressive disorders and others. Consequently, two groups are formed: one of depressive disorder and the other of the control group therefore facilitating the appropriate comparisons. Both groups will be reevaluated 6 months after the five assessment. **Results and Discussion:** During this period, 264 patients were hospitalized for more than five days. 31 (12%) died before opportunity for interview. 105 patients were selected among the rest by using the "catch as can catch" method, very close to random. We excluded 42 patients (40%) due to the presence of cognitive disorders, 5 patients (5%) because of alcoholism and 7 (7%) delirium sufferers. Finally, 7 patients (7%) met some of the ICD-10 criteria for a depressive disorder: 3 depression episodes, 1 dysthymia and 3 moderate adaptive depressive disorders. No psychiatric consultation had been requested for any of these patients by their attending physicians. 18 patients (17%) did not show any psychiatric disorder. These results are further discussed with relation to the current literature on this topic and the goals of the investigation.

154 - SUICIDE ATTEMPT IN THE PRESENCE OF PSYCHIATRIST. ANXIETY AND RESPONSIBILITIES Djalina M, Markantonaki M. Psychiatric Clinic, General State Hospital of Athens, Athens, Greece

In this report we would like to share our experience of a suicidal attempt in one of our patient's attendant, in the urgent pathological surgeries while the hospital was on duty. >From a review of the psychiatric department's data of this hospital, during the period of 1989-1999, there have been hospitalized 146 patients with suicidal

attempts that is about a 49,6% of medical interns via Liaison Psychiatry. In addition, during the year 2002, suicidal attempts were the first reason for the youth between the age of 15-21, which were admitted to psychiatric examination while the hospital was on duty. Through out the twenty-five years of our Psychiatric Clinic's operation three cases of suicide have been committed; 1) two cases of suicide by inpatients that have been hospitalized for only one day (fell from a high rised place) and 2) one case of suicide that has been hospitalized for ten days (was hanged). The above findings establish that our experience with suicidal patients is very significant and also illustrate the responsibility that we experience, in combination with social difficulties that we confront, through the practice of our medical duty. Seldom, does a psychiatrist become an eyewitness of a serious suicidal attempt of a non-patient of a psychiatric clinic. This is how the incident occurred: "On 17 of June 2002 at 3p.m. I was called from a frightened, but usually composed, responsible and experienced specialist in order to prevent an unknown young woman with a foreign accent, from falling from the forth floor of the hospital's building. She was swaying between existence and non-existence. This incident reminded me a scene of a scary movie with the difference that I was not simply a viewer and the "happy end" was not determined". These four hours of experience and the feelings of disposition and exasperation will be noted down in this report.

217 - DEPRESSIVE DISORDER AND LACK OF A CLOSE CONFIDANT ARE ASSOCIATED WITH YOUNGER AGE AT FIRST MI Dickens C. Department of Psychiatry, Manchester University, United Kingdom

Background: Depressive disorder is recognised as primary risk factor for coronary heart disease and as a secondary risk factor for a poor prognosis following myocardial infarction (MI). We aimed to assess the impact of depression on the timing and severity of first MI. **Methods:** Consecutive patients aged less than 80 years, admitted to hospital following their first myocardial infarction, were screened for this study. From consenting subjects, baseline socio-demographic details and history of smoking were recorded along with details of current social support and socio-economic status. Past medical and psychiatric history and severity of the index MI (Killip Class) were also recorded. Subjects were interviewed using the Schedule for Clinical Assessment in Neuropsychiatry (SCAN) to detect psychiatric disorders in the month before the MI, and the Life Events and Difficulties Schedule (LEDS) to assess life stresses in the 12 months before MI. **Results:** 314 (88% of eligible) patients were recruited; 63% were male. 63 subjects (20%) were depressed and 23 subjects (7.4%) lacked a close confidant. On multivariate analysis, controlling for possible confounding factors, depressed patients were, on average, 4.0 years younger, and those that lacked a close confidant were 5.6 years than the remainder. Smoking cigarettes had an comparable effect on age at first MI with smokers being, on average, 7 years younger than non-smokers at the time of their first MI. Variables independently associated with more severe MI class were age ($OR=1.04$, $p=0.002$), a history of angina prior to MI ($OR=2.7$, $p=0.003$) and presence of depressive disorder ($OR=2.1$, $p=0.022$). **Conclusion:** Depression and social support represent risk factors for the early development and increased severity of MI. Future programmes of prevention of coronary heart disease should consider screening and appropriate interventions for depression and lack of social support in addition to attempting to reduce conventional risk factors for coronary heart disease such as obesity, cholesterol and smoking.

215 - DEPRESSIVE MOOD IN COELIAC DISEASE PATIENT IS ASSOCIATED WITH A STRICT GLUTEN FREE DIET Dolleans MC, Grosdidier E, Rault D, Cellier C, Consoli SM. Department of C-L Psychiatry Georges Pompidou European Hospital, Paris, France

Increased rates of anxiety and depression were already found among patients presenting with Coeliac Disease (CD), but few research was carried out until now on the factors associated with depressive mood among CD patients and on the links between depression and compliance with gluten free diet, which is an essential element of the treatment. Our study aimed at measuring the prevalence of depressive symptoms among adult patients followed up for CD and to explore the relationships between depressive mood, various general, clinical or psychological characteristics of the population and the perceived

cost/benefit ratio (CBR) as regards diet constraints. Sixty CD outpatients (83% of women) aged 35.6 (SD 13.6) years (23% <25 yrs) filled out a series of questionnaires and 2 visual analogue scales respectively evaluating the constraints and the benefit of the diet, leading to a crude CBR score, then to a logarithmic transformation of the variable in order to obtain a normal distribution. Digestive symptomatology and compliance were assessed by the gastroenterologist and the dietitian. Symptomatic CD represented 42 % of the cases. Mild or significant diet breaks were noted in 47% of the cases. Depressive symptoms (HAD-D>8) were observed in 35% of the subjects. Depressiveness was more frequent in symptomatic CD ($p<0.03$), among patients older than 25 ($p=0.013$) and among patients strictly compliant with diet ($p=0.04$) but was not related to CBR ; the latter was however negatively correlated with problem focused coping. A multiple logistic regression confirmed that depressive mood was independently predicted by a symptomatic character of CD, a strict compliance, low scores of problem focused coping and, marginally, an older age. These results encourage to pay more attention to the emotional balance of the most disciplined CD patients and to supplement the dietetic follow up by psycho-educational measures.

198 - HEMODYNAMIC EFFECTS OF DEPRESSION

Ehrenthal J, Herrmann-Lingen C, Fey M, Schauenburg H. Department of Psychosomatics and Psychotherapy, University of Goettingen, Germany

Background: Research concerning depression and cardiovascular disease has increased the interest in the relationship between cardiac reaction to stress and different psychological factors. **Objective and Methods:** In an ongoing study cardiac parameters of 28 depressed and 20 non-depressed subjects are compared during phases of induced stress ('anger recall') and during relaxation. Cardiac parameters such as heart rate, blood pressure and stroke volume as well as psychological measures (BDI etc) were assessed. ANOVA's were used to compare the two groups during stress, relaxation and, as a measure of recovery, the amount of difference between these phases. **Results:** Having a non-significantly lower heart rate during induced stress, the depressed subjects showed a significantly higher heart rate during relaxation ($p<0.03$) resulting in a significantly impaired recovery ($p<0.00$). The depressed subjects also showed a significantly smaller recovery of the systolic blood pressure ($p<0.03$) and the diastolic blood pressure ($p<0.03$), also having a non-significantly lower blood pressure during stress. The mean stroke volume during all three phases was lower in the depressed subjects than the non-depressed with a significantly less efficient relaxation ($p<0.04$) and a trend towards a lower increase between the stress- and relaxation-phase ($p<0.11$). Cardiac index of the depressed subjects was also lower during all three phases with a significant difference during the stress phase ($p<0.01$) and in recovery measures ($p<0.01$). **Conclusions:** The main results of a generally smaller stroke volume, especially during relaxation, which is not completely compensated by a higher heart rate, indicates a reduced circulatory efficiency in depressed patients. These results are compatible with a deficit in basal vagal tone and autonomic stress response in depressed patients.

108 - EXPERIENCES OF FAMILY MEMBERS IN THE INTENSIVE CARE UNIT COMPARED WITH

EXPECTATIONS OF THE STAFF Myhren H, Ekeberg O, Langen I, Stokland O. Ullevål University Hospital, Oslo, Norway.

Objective: To determine satisfaction regarding information, support and facilities of relatives in the intensive care unit (ICU), and to compare this with the staff's expectations on these issues. To determine relatives' degree of psychological distress and use of hypnotics, anxiolytics and antidepressants. Finally, to compare the distress of relatives of survivors and non-survivors. **Design:** Prospective study. **Setting:** University-affiliated ICU. **Methods:** Relatives of 50 patients who survived in the ICU after at least six days and to 18 relatives of non-survivors who stayed for at least 24 hours completed a mailed questionnaire anonymously at home four weeks after treatment in the ICU. Forty-three staff members answered the questionnaire. Degree of satisfaction was measured on a five-point scale (0-4). **Main results:** The average scores for satisfaction were 3.4 ± 0.4 SD for relatives of the survivors and 3.4 ± 0.5 for the non-survivors. The staff expected a significantly lower degree of satisfaction, with a score of 2.7 ± 0.4 ($p<0.001$). The distress score for relatives of survivors (2.7 ± 1.0) was not higher than those of relatives

of non-survivors (2.4 ± 0.6) during the ICU stay, but significantly lower than the staff expected (3.2 ± 0.5) ($p<0.01$). The use of medication was rather moderate. **Conclusions:** The relatives were very satisfied with the support and communication in the ICU despite substantial distress. Their satisfaction was greater than the staff anticipated. Staff generally expected a higher degree of distress among relatives than was actually the case. Relatives of survivors and non-survivors were equally satisfied.

300 - BODY AWARENESS THERAPY (BAT) - A NEW STRATEGY FOR RELIEF OF SYMPTOMS IN IBS

PATIENTS Eriksson E, Möller I, Eriksson H, Kurlberg G. Department of Medicine and Surgery, Sahlgrenska University Hospital/Östra, Gothenburg, Sweden

Background: Irritable Bowel Syndrome (IBS) is mainly characterised by different gastrointestinal symptoms. Based on stool habits, IBS could be divided into symptomatic subgroups. We have earlier shown that 12 weeks of BAT reduced gastrointestinal and psychological symptoms in IBS patients with mainly constipation (Eriksson 2002). The aim of the present study was to compare IBS patients with apparently healthy persons and to evaluate efficacy of 24 weeks of BAT. **Method:** Twenty-one patients with IBS (Manning) were included in the study. At baseline, after 12 and 24 weeks with BAT, all patients were asked to fill in questionnaires i.e. GI (Agreus 1993), SCL 90 (Degoratis 1973), SOC (Antonovsky 1993). Resource Oriented Body Examination (Eriksson 2000) and Body Awareness Scale (Roxendal 1997) were chosen to provide information about the patient's body awareness. Venous blood samples were taken in a fasting condition from an antecubital vein for analysis of RBC, HB, WBC, uric acid, creatinine, lipids (TG and Chol), thyroxine, TSH, C-peptide, prolactin, t-PA-PAI complex, CRP and cortisol (blood and saliva). Twenty-one healthy volunteers (controls) underwent the same examination procedure once. **Results:** IBS patients compared to healthy controls showed more bodily loading/tension and more psychological and gastrointestinal symptoms. They also scored a lower sense of coherence and more pain. The IBS patients also had higher values of C-peptide and triglycerides in blood. Saliva cortisol was decreased during the day compared to the controls. A 24-week BAT gave relief of both gastrointestinal and psychological symptoms as well as pain, not only abdominal pain but also in the whole body. The patients scored relief of both somatic symptoms and depressive symptoms in parallel. A follow-up was done 6 months after end of treatment and they still scored relief of the tested parameters. Biochemical variables such as the saliva slope of cortisol during the day were changed in a positive way. **Conclusion:** Patients with IBS were relieved of symptoms after 24 weeks of BAT. The various IBS subtypes (diarrhoea, constipation or mixed) seem to need different treatment durations with BAT.

268 - DEPRESSIVE SYMPTOMS ENSUING HERPES ENCEPHALITIS – AN UNDERESTIMATED

PHENOMENON? Fazekas Ch, Enzinger C, Wallner M, Leonhardt S, Pieringer W, Fazekas F. Department of Medical Psychology & Psychotherapy, Department of Neurology, Department of Neuroradiology, Graz, Austria

Background: Cognitive deficits like amnesia and dementia are well known sequelae of herpes simplex virus infection of the CNS (HSV1). Thus, previous long term follow-up studies predominantly focused on neurological and neuropsychological deficits, whereas residual affective symptoms have hardly been investigated. Given the neurotropism of the herpes virus for the limbic system and the temporal lobe we therefore aimed to further explore such a potential association using a screening test for depression in the long-term follow-up of HSV1. **Methods:** Selected from a retrospective study of 53 patients, who had been diagnosed with HSV1 in the University Hospital of Graz over a period of 15 years, we contacted 26 subjects by telephone (10 females and 16 males, age 49.7 ± 25.7 years) 5.1 ± 3.1 years after disease onset to obtain a structured interview including the „Well-Being-Five“ (WB5; a screening-instrument for depression) and the „Short-Form-12“ Test (SF-12; a health-related quality of life instrument). **Results:** In almost 40 percent of the interviewees ($n=10/26$; 38.5%), there was evidence for depressive symptoms (WB5 < 13, median 13.4 ± 5.8). In contrast, only four of them received adequate therapy. Concerning affective symptoms, the participants' health-related quality of life was equally or even more affected than in

serious chronic disorders (SF-12 score: 48.1+/-9.3; cancer: 49.6; chronic heart-failure: 47.8, diabetes: 50.1), although patients felt less impaired in terms of physical symptoms (51.9+/-9.6; cancer: 41.5, heart-failure: 36.8, diabetes: 38.9). Personal changes induced by the disease were perceived by 61% and 27 % felt that their life had changed due to the disease. Disease specific symptoms, such as impaired memory, speech disorders, ataxia, headache, sensorimotor deficits, and epilepsy were reported in 4, 3, 2, and 1 patient each, respectively. Conclusion. Our results strongly suggest a surprisingly high prevalence of depressive symptoms associated with HSVL. Neither patients nor physicians seem to be aware of this situation, although there are therapeutic options available. However, prospective studies with larger numbers of participants are required to confirm and further specify the assumed causal relationship between these findings.

103 - FREQUENT ATTENDERS OF PRIMARY CARE:

IMPACT OF PSYCHIATRIC AND PSYCHOSOMATIC

COMORBIDITY Ferrari S, Galeazzi GM, Rigatelli M. Department of Psychiatry and Mental Health, University of Modena and Reggio Emilia, Formigine, Italy

Minor psychiatric problems such as anxiety, mild depression and somatization are common in non-specialistic medical settings, particularly in primary care: they affect up to 60% of patients in a GP clinic [1]. Several previous studies have suggested that they may play a role in causing a disproportionately high use of health care services, especially when they are combined to medical morbidity [2]. The 50 top most Frequent Attenders (FAs) at a GP clinic in the north of Italy were compared to 50 randomly selected normal attenders. Socio-demographic and medical data were collected from GP files. The SCID-brief version for research and the Diagnostic Criteria for use in Psychosomatic Research (DCPR [3]) were administered to both patient groups. Quality of life was also evaluated through the WHOQOL brief version. Among FAs, 98% suffered from at least one medical disorder and 68% from at least one psychiatric disorder, versus 54% and 6% respectively in the control group. Medical-psychiatric co-morbidity was more frequent in the FA group, 66% of whom gave positive results to all three diagnostic fields (medical, psychiatric and psychosomatic), versus 4% of controls. Quality of life was found to be significantly poorer among FAs. Data from the present study confirm the association between medical-psychiatric co-morbidity, frequent attendance and excessive utilization of primary care resources; they also suggest the need to develop effective diagnostic and therapeutic tools able to address concurrent psychological distress which may not be recognised as such using established diagnostic techniques.

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255 - WOMEN'S HELP-SEEKING BEHAVIOUR IN PRIMARY CARE: PHASE 2 OF A MIXED METHODS STUDY

Fiddler M. Psychological Medicine Group Manchester, England

Background: Previous quantitative and qualitative studies have tended to focus on those individuals who attend their GP on a frequent basis, but very little is known about the processes involved in why, how and when women choose to seek formal support from primary care services. **Aims:** To explore the way women access primary care services, factors which influence individual decisions to consult and the role of illness cognitions and coping. **Design:** Semi-structured interviews were analysed using the constant comparative method. Maximum variance sampling was used from data obtained in phase 1 to include women with both differing levels of health anxiety and consultation rates. **Participants:** 24 women aged 20-82 years recruited from one GP practice. The sample comprised women from a diverse range of socio-economic groups according to their occupations. Three of the women were of Asian origin, while the remainder were white. **Results:** Frequent attenders within this study were attending mainly at the request of the GP, the majority of these women had a depressive disorder or high levels of health anxiety. A large proportion of women were attending for chronic disease management. The majority of

women used self-management strategies and/or contained their symptoms prior to seeking formal support from their GP. The women's narratives highlighted various coping skills they used including cognitive avoidance and denial, seeking information and support and resigned acceptance. **Conclusion:** This study has advanced knowledge regarding frequency of attendance by using both quantitative and qualitative methods. The qualitative data provides insight into the process of help-seeking behaviour within primary care for women with differing levels of health anxiety and consultation rates. In particular it illustrated the way in which women make sense of their symptoms, the role of health anxiety and the various coping styles they use. The complexity and interplay of factors and determinants of primary care service utilisation suggests that a mixed methods approach is particularly useful in understanding such processes. The way in which this may impact on future service delivery requires further study.

97 - PSYCHOSOCIAL CARE OF ELDERLY PEOPLE BY GENERAL PRACTITIONERS – WHERE ARE THE PROBLEMS?

Fritzsche K, Schultz C, Sandholzer H, Brucks U, Cierpka M, Deter HC, Härter M, Höger C, Richter R, Schmidt B. Department of Psychosomatic Medicine, Freiburg, Germany.

Psychosocial services have been a part of the primary care setting in Germany since 1987. Problems in the diagnosis and therapy of psychosocial problems and psychosomatic disorders were assessed in the framework of an eight-center national demonstration program. General practitioners (n=191) from six regions participated in the study. Of the 1229 patients with documented treatment episodes with predominantly psychosocial symptoms, 238 patients (19.3%) were 60 years of age or older. Differences between younger and older patients with respect to psychosocial distress, health beliefs, therapeutic procedures and treatment satisfaction were analyzed. Older patients were significantly more affected by depression, pains, insomnia and physical illnesses. They were more fixated on somatic expression and more frequently without psychological attribution to the illness. However, they developed a psychological attribution to the illness to the same extent as the younger patients. Both groups received psychosocial interventions with the same frequency. Older patients were more frequently treated with psychotropic drugs and referred 50% less often for outpatient or inpatient psychotherapy. The general practitioner estimates mutual understanding significantly worse than with younger patients, although older patients reported feeling understood by the doctor just as frequently as the younger patients. Psychosocially trained general practitioners also have inhibitions about referring older patients for psychotherapy, although the effectiveness of psychotherapy of elderly people has been empirically validated.

37 - VIDEO CONFRONTATION WITH BODY IMAGE IN THE TREATMENT OF BULIMICS AND ANOREXICS

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Successful treatment of Anorexia and Bulimia nervosa implies regaining regular food intake, reduction of 'forbidden' food, acceptance of normal weight and body shape, strengthening of self esteem, and raising of social skills. Also – for anorexics – weight gain is essential, as stop of purging activities (e.g. vomiting) is for bulimics. In our study we focused on helping patients getting a realistic perception and view of their body (which is distorted in a way of feeling extremely fat). Correcting perceptual distortions can facilitate therapeutic commitment and improvement with food management. The study implied a pre – post control design (Ss: N = 50 Inpatients, mostly Anorexia, restrictive or purging type) with several measures like perceptual accuracy, subjective perception and feeling of body, eating related emotions and cognitions, fear of weight gain, and public and private self consciousness. **Intervention:** (a) 30 min. video recording of body and certain movements (fixed script), (b) 3 confrontational sessions (semi structured 1 : 1 therapeutic format, 40 min. each). **Results:** Participants of the experimental group did significantly better in correcting their body image, accepting shape and look, and reducing fear of weight gain. Interestingly, data revealed, that distorted body view is no pure perceptual phenomenon. Effects on self consciousness showed better private but worse public self consciousness.

29 - AFFECTIVE PROCESSING IN REACTIVE DEPRESSIVE PATIENTS – A STUDY WITH FMRI

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The aim of this study was to investigate the neural correlates of affect processing in reactive depressed patients and healthy controls. The neural bases of chronic depressive mood in reactive depressive / dysthymic patients is unknown. Based on previous reports, that have suggested abnormalities in structure and function of the prefrontal cortex, anterior cingulate, hippocampus and amygdala in depression we hypothesized differences between patients and controls in this brain regions. Methods: 8 female patients with reactive depression or dysthymia as defined by the Structured Clinical Interview for DSM-III-R and age matched healthy woman participated in the study. For functional magnetic resonance imaging (fMRI) measurements we used a block design of 4 auditory stimuli of different emotional quality (pleasant sounds of chimes, unpleasant peep tones, neutral words and words with affective valence) alternating with off-periods. A gradient echo T2*-weighted sequence was used for the functional scans (16 slices). Results: Both groups showed significant blood oxygen level dependent increases (BOLD) in the auditory and the prefrontal cortex at all stimuli as well as in the speech processing areas at hearing words. Increases were greater for negatively valenced stimuli. Distinct differences between groups were found for the activations in the limbic system (hippocampus, amygdala) and the prefrontal cortex with significantly higher activations of the depressive patients compared to controls. The emotionally distressing tone stimuli and the emotionally pleasant chimes revealed an activation of the anterior cingulate cortex and griseum centrale mesencephali in patients only. Conclusion: This fMRI-study indicates altered cerebral response patterns in the limbic system and prefrontal cortex to affective auditory stimuli in patients with reactive depression/ dysthymia. With regard to findings in major depression these results suggest an abnormal affect processing also in milder forms of depression. The increased responsivity observed in the cingulate and orbitofrontal cortices is discussed involving emotion and memory in depressive disorders.

114 - MENTAL REPRESENTATIONS OF SELF, LUNG, DONOR AND MEDICAL STAFF AFTER LUNG TRANSPLANTATION – A QUALITATIVE APPROACH TO COMPLIANCE

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Background: In transplantation medicine, compliance is one of the crucial problems impairing outcome after an organ transplantation. Unfortunately, the reasons for in compliant behaviour are often unknown. Methods: In the present study 20 patients after lung-transplantation were interviewed about their thoughts and feelings, with regard to self, lung, donor and medical staff. Global compliance was assessed by the medical doctors. Qualitative data-analysis was done by identifying different categories, supported by the software-program atlas.ti. The mental representations of highly, medially and low-compliant patients were compared and typical patterns of the compliance-groups identified. Results: Highly compliant patients report more personal profit by transplantation than low-compliant patients; e.g. they experience an increase of self-competence and autonomy after lung transplantation. In contrast, most of the low-compliant patients report a decrease of self-competence. In the medial and low compliance group patients report more distance to the transplanted lung than in the high compliance group. Some patients with medial and low compliance report a very close relationship to the donor, adopting for example some of the donor's imagined personal traits. Moreover, the relationship to the medical staff in the low compliance group is more complex and difficult. These patients, for example, report less emotional closeness, but more needs for both personal support and autonomy than highly compliant patients. Conclusion: In our opinion, the feeling of a personal profit through transplantation is crucial to actual compliance behaviour. Probably, the experience of this profit takes place in the context of a good doctor-patient-relationship. Emotional distance to the lung and an extraordinary close relationship to the donor, could both be interpreted as a failure in the psychological processing of transplantation; this failure may be a further risk factor for non-compliance.

41 - INDIVIDUAL MEANING CONSTRUALS AND THEIR RELEVANCE FOR HEALTH AND WELL-BEING

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Nowadays there are various possibilities to find meaning in life, but society offers no fixed or reliable way anymore. In order to evaluate ones life as meaningful, four basic needs (purpose, value, efficacy and self-worth) have to be fulfilled (Baumeister, 1991) and to get orientation in life everybody has to construct his or her own individual meaning system. In an experimental study a new approach was used to assess the complexity of individual construals of meaning in different groups. It was tested (1) whether structural measures of meaning construals are related to mental health, somatic health and subjective well-being and (2) whether they are sensitive to different degrees of meaning expertise in terms of the complexity of personal meaning. Method. Data was assessed in three samples: students of theology, natural sciences and patients suffering from psychosomatic disorders (each n = 30). The participants were asked to name things that provide meaning to their lives and to describe how these elements are connected to each other. Four quantitative measures were calculated to represent (1) the accessibility of meaning-related knowledge, the degree of (2) differentiation and (3) elaboration of individual meaning construals and their (4) coherence. Besides, various measures of subjective well-being and somatic and mental health were included. Results. Differentiation, elaboration and coherence measures of individual meaning construals correlated with measures of physical and mental health and subjective well-being and were a significant predictor of life satisfaction. The meaning structures of the students were more complex than those of the patients, they were better able to fulfil the need for efficacy and value and showed higher levels of mental health and subjective well-being. Compared to the science students theology students were more satisfied with their lives and had a higher sense of coherence. Besides, they were better able to connect their meaning elements and their meaning construction was calculated as more coherent. Discussion. The results indicate that structural measures offer a promising approach to illustrate how people actively construct meaning and to analyse the influence on health and well-being.

81 - CORTISOL LEVELS IN CHILDREN AND RELATION TO PSYCHOSOCIAL FACTORS

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The hypothalamic-pituitary-adrenal (HPA) axis is a neuroendocrine circuit involved in the homeostatic response to physical and psychological stressors. Cortisol, main end product of the axis, modulates a multitude of bodily functions, and the basal secretion displays a diurnal rhythm. Several psychiatric disorders and socioeconomic factors relate to the basal pattern of secretion. The aims of this study were to establish reference values for salivary cortisol (the biologically active portion) in Swedish children, and to investigate if differences were related to gender, age, behavior and socioeconomic status. 341 children, aged 6-12 years from two schools in different social and environmental areas, participated. Psychosocial information was obtained through a behavioral questionnaire (The Strengths and Difficulties Questionnaire) and a questionnaire concerning basic demographic data of the child and the family. Saliva samples were collected from the children during three days at 08.30 h, 10.30 h and bedtime (circa 21.00 h). The samples were analyzed using a commercial immunoassay method. Individual mean and median values for each sampling time, the area under the curve (AUC, yielding a measure for total cortisol), and the quotient of the morning and evening concentrations were calculated. Cortisol concentrations (median (range), nmol/L) measured 4.8 (1.3- 39.3), 3.1 (0.6- 26.9) and 0.9 (0.0- 22.5). The AUC correlated with the inverse morning-evening quotient ($r = 0.29$; $p < 0.001$). There was no significant difference between age groups or sexes. ANOVA examining differences in AUC revealed a significant interaction between dichotomized subgroups of impact of behavior problems, country of origin and social class ($p < 0.001$). The subgroup possessing all three supposedly negative factors ($n=8$) had significantly ($p < 0.0001$) higher AUC, compared to the subgroups with none ($n=155$), one ($n=83$) or two ($n=26$) factors. There were no significant differences between these subgroups. In conclusion, we found a diurnal variation of cortisol secretion, with levels slightly lower than in adults and great individual variability. We also found

significantly higher levels in children simultaneously exposed to multiple behavioral and social stressors.

4 - ANXIETY AND DEPRESSION IN ULCERATIVE COLITIS AND ILEAL POUCH ANAL ANASTOMOSIS

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Background and aims: Within the biopsychosocial model categorical anxiety and depression are differentiated from dimensional anxiety and depressiveness. We assessed if the amount of anxiety and depressiveness measured by the German version of the Hospital Anxiety and Depression Scale (HADS-D) and a probable psychiatric diagnosis given with a HADS-D score ≥ 11 in at least one subscale of the HADS-D in patients with ulcerative colitis (UC) and ileal pouch anal anastomosis IPAA are associated with the presence of pouchitis and health related quality of life (HRQOL). **Methods:** 61 patients with UC (age 52.7 ± 13.9 years; 47% female) completed the German version of the Inflammatory Bowel Disease Questionnaire (IBDQ-D) and the German version of the Hospital Anxiety and Depression Scale (HADS-D). Pouchitis was defined by the Pouch Disease Activity Clinical Score (PDAI) ≥ 2 in all patients resp. PDAI Total Score ≥ 7 in 37 patients in which endoscopy was performed independent from current symptomatology. **Results:** 25% of the patients scored ≥ 11 in the HADS-D anxiety subscale, 1,6 % scored ≥ 11 in the HADS-D depression subscale and 25,0 % scored ≥ 11 in at least one subscale of the HADS-D. The frequency of patients which scored ≥ 11 in at least one subscale of the HADS-D did not differ between the patients without and with pouchitis defined by the clinical and total PDAI (Chi2 = 0.2 resp. 2.0). The amount of anxiety and depression did not differ between patients with and without pouchitis ($z = 0.9$ resp. 0.1) defined by the clinical and total PDAI score ($z = 0.9$ resp. 1.6). The mean anxiety and depression scores of patients with and without pouchitis were below the German cut off values of the HADS-D of anxiety ≥ 11 resp. depression ≥ 9 . Patients which scored ≥ 11 in at least one subscale of the HADS-D differed in the IBDQ-D total score ($z = -2.1$, $p = 0.03$) from patients which scored < 11 in the HADS-S subscale scores. The IBDQ-D total score was significantly correlated ($p < 0.001$) with the amount of anxiety ($r = -0.52$) and depression ($r = -0.56$). **Conclusion:** The amount depression and anxiety (dimensional model of psychiatric distress) as well as a probable psychiatric disorder (categorical depression diagnosis) indicative by a score ≥ 11 in at least one subscale of the HADS-D in patients with UC and IPAA is not dependent from pouchitis. Dimensional as well categorical anxiety and depression have a negative impact on HRQOL.

6 - DISEASE RELATED WORRIES AND COMORBIDITIES DETERMINE QUALITY OF LIFE IN CHRONIC HEPATITIS

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Background and aims: The therapy of chronic hepatitis C by interferon and ribavirin is substantiated not only by the prevention of liver cirrhosis and hepatocellular carcinoma but also by the reduced health related quality of life HRQOL even in non cirrhotic patients. We studied how far HRQOL in patients with chronic hepatitis C is determined by disease related somatic and psychosocial determinants. **Methods:** 94 consecutive patients attending a liver center took part in the study of which 88 complete data sets were available for analysis. HRQOL was assessed by the Short Form Health Survey SF 36, the degree of disease related worries by the subscale "worries" of the German version of Chronic Liver Disease Questionnaire CLDQ-D. Psychiatric comorbidity was supposed if at least one Hospital Anxiety and Depression Scale German Version HADS-D Score was ≥ 11 . Disease related data (liver cirrhosis according to the Child Pugh classification), current complications (gastrointestinal bleeding, hepatic encephalopathy), liver specific medication (IFN, diuretics, β -blocker) and active medical comorbidities (defined as other somatic diseases requiring current medical treatment) were collected from the charts. Age, sex, regular tobacco and alcohol consumption were additionally entered as independent variables into a multiple regression with p in and out = 0.01. **Results:** From 88 patients (Age 48.6 ± 14.6 years, 50% female) 62 (70%) had no cirrhosis, 15 (17%) a Child A -, 5 (6%) Child B - and 6 P (7%) Child C - cirrhosis. The mental summary score of the SF 36 was predicted by psychiatric comorbidity (corrected $R^2 = 0.33$, $\beta = -9.6$, $p < 0.001$) and the amount of disease related worries (corrected $R^2 = 0.42$, $\beta = 0.6$, $p < 0.001$), the physical summary score of the SF 36 by the amount of disease related worries

(corrected $R^2 = 0.32$, $\beta = 0.8$, $p < 0.001$) and the number of active medical comorbidities (corrected $R^2 = 0.38$, $\beta = -2.0$, $p = 0.006$). The amount of disease related worries was predicted by psychiatric comorbidity (corrected $R^2 = 0.25$, $\beta = -1.5$, $p < 0.001$) and musculoskeletal diseases requiring analgetics (corrected $R^2 = 0.31$, $\beta = -1.1$, $p = 0.004$). **Summary:** The HRQOL of patients with chronic hepatitis C is not determined by the severity of the liver disease and its current complications but by psychiatric and medical comorbidities including disease related worries. Further studies could clarify if psychoeducative treatments could improve HRQOL by reducing psychological distress and inadequate disease related worries more safe and inexpensive than IFN/ribavirin in patients with slight inflammation/fibrosis and minimal risks of developing a cirrhosis.

129 - PSYCHOSOMATIC PHYSIOTHERAPY

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The Center for Psychosomatic Diseases, Eikenboom, is the only tertiary referral center for patients with severe psychosomatic diseases in the Netherlands. With our interdisciplinary team, we diagnose and treat amongst others clients with chronic pain, chronic fatigue, conversion and post traumatic dystrophy. We aim to generate knowledge through research and to promote international cooperation of specialists working in these complicated fields. As physiotherapists, we are completely embedded in the interdisciplinary team. We work with physical training and massage. Most of our clients cannot walk anymore and are wheelchair bound. In our therapy, we address the client's physical (dys-) functioning as well as the client's body image, which is often distorted. Our first aim in therapy is that the client restores contact with his/her own body and bodily signals. We invite clients to share with us their bodily sensations. Moreover, through explanation of the physiology of their symptoms, through observation and feedback and through specific exercises, we enable clients to restore their body-image so that self-appreciation becomes possible through cognitive understanding and experimental discovery. This forms the basis from whereon we can start building up their physical condition and work on their specific physical problems. We like to present a poster on which we will describe our way of working. The themes we use are: physical limits in training, handling dysfunction, observation, position and movement, making contact, haptonomy. In two cases we describe the process of revalidation. Each case will be illustrated with photographs or, if technically possible, with a video/dvd.

113 - THE CONTRIBUTION OF NARRATIVE PSYCHOLOGY TO INTRAPSYCHIC DYNAMICS OF COLORECTAL CANCER PATIENTS

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In the middle of the 1980s a new paradigm appeared in psychology, which emphasized the epic character and the narrativity of our knowledge and thinking. According to the narrative principle, human beings think, perceive, use their imagination and make moral decisions on the basis of narrative structures. The untied narrative is not a simple report about what had happened, but it implies a lot of psychological characteristic features connected to the events. Based on its mental and linguistic-semiotic character the narration as a form of representation may provide an adequate frame to the examination of individuals' intrapsychic reality. The method of narrative psychological content-analysis is to reveal the psychological meaning of narratives, not only on the level of words and themes, but along the narrative qualities: the time-conditions, the perspective, the characters, the functions, the coherence as well as complexity. The connection between the narrative and the intrapsychic occurrences seems to be the most evident in case of biographies. Therefore we have chosen for the subject of our research, the personality examination of 30 malignant colorectal cancer patients aged between 45 to 65. We carried out Szondi's projective test and narrative psychological content-analysis of their life-stories. In the last decade the number of people suffering from colorectal cancer has increased, and in the due course mortality has also risen. Comparing the life narrative of cancer patients and healthy controls by using the method of narrative psychological content-analysis and Szondi's projective test we found qualitative differences. Based on the evidence of this qualitative differences we are able to draw clear and reliable conclusion and make distinction between colorectal cancer patients and healthy persons in terms of intrapsychic occurrences.

65 - A STANDARDIZED MENSENDIECK TEST (SMT)

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Objective: A standardized test was developed in order to evaluate posture, gait, sitting posture and respiration of women with chronic low abdominal pain (CLAP, ICD10 F45.4). The test was based on the Mensendieck principles of observation and analysis of posture and movement patterns. **Design:** 15 women with CLAP and 15 matched controls were examined, and the video recordings blindly evaluated by three experienced Mensendieck physical therapists from the Oslo college. Scores from 0 (for least functional movement) to 7 (optimal function) were assigned to each test person according to a test manual. **Results:** Excellent intraclass correlation (0.82-0.97) were found among the raters. The standardized Mensendieck test (SMT) discriminated well between women with CLAP and the healthy controls in all subtests ($p=0.01$). The lowest scores were found for gait (2.70 vs. control 5.60) and respiration (2.88 vs. control, 5.63). **Conclusions:** These results may indicate that the Mensendieck method may be useful in the evaluation of patients with somatoform disorders. It may also point towards a possible therapeutic approach to patients with CLAP. **Key words:** Mensendieck test, Evaluation of motor function, Chronic Low Abdominal Pain, Somatoform Disorders.

267 - THE PREDICTORS OF MEDICAL COMPLIANCE WITHIN PATIENTS WITH CARDIOVASCULAR DISEASES

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The purpose of the study was to investigate the relations between the compliance to the medical regimen among patients with cardiovascular diseases, self-efficacy and sense of coherence. It was assumed that age and gender might moderate the relations between compliance, its predictors, and duration of the disease. Participants were 60 cardiology patients in a Romanian hospital (male 29, female, 31), aged 25 to 77 ($M = 52$) and average illness duration 11.3 years (range from 1 to 60 years). Self-efficacy was measured with General Self Efficacy Scale (Jerusalem & Schwarzer, 1992). Sense of Coherence Scale (Antonovsky, 1987) was used to assess sense of coherence. The compliance to the medication and the prescribed regimen, was evaluated by physicians, on a one item scale (answers ranged from not at all compliant to very compliant). Correlation analysis was performed for two age groups (less than 52, the young group, 53 or above, the old group). Regarding women from both age groups, the longer the duration of illness, the lower the compliance ($r = -.66$, $p < .001$ for younger women and $r = -.67$, $p < .001$ for older women). This pattern of association was not found for both age groups in a subsample of men. For the younger men, the compliance is also negatively correlated with the duration of the illness since diagnosis ($r = -.66$, $p < .05$), but there is no correlation between compliance is also negatively correlated with the duration of the illness since diagnosis in older men. No significant associations between General Self-Efficacy Scale and the compliance were found. Significant associations were found for sum score of 3 items of General Self-Efficacy Scale (6, 8, and 9). General self-efficacy measured with the sum score of these items was related to the compliance, but only in older men ($r = .76$, $p < .001$). The study shows that associations between the compliance, its predictors and duration of illness should be studied in the context of gender and age.

156 - INTEGRATION OF A PSYCHO-ONCOLOGICAL SCREENING IN THE DAILY CONFERENCE OF A COMPREHENSIVE CANCER CENTER

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Psycho-oncological care has already been established in many cancer centres and taken for granted for years. However little is known about indicators of urgent needs of specific psycho-social support and psycho-oncological high risk patients. To identify those individuals who will benefit most from psycho-oncological care an integrated setting of early psycho-social diagnostic and evaluation has been developed. At the Klinikum Rechts der Isar, Technical University, Munich all patients who might benefit from a multidisciplinary treatment regimen are discussed in the daily cancer centre conference for visceral tumors. In this interdisciplinary panel the experts are

conferring about all examination findings of each patient to determine the best individual treatment plan. With the objective of integration of psycho-oncological diagnostic and care we developed an assessment instrument (will be presented) for each patient newly admitted to the cancer centre filled in by the doctors. The questionnaire contains physical, emotional, social and familial aspects. If necessary a psycho-oncologist is summoned. The results of the psycho-social exploration will then be discussed with the findings of the physical examination and tumor staging at the interdisciplinary tumorboard. Thus psycho-oncological evaluation initially has an influence on the individual treatment planning. At the same time of admission to hospital as well as at the end of treatment patients fill in a selection of self-assessment questionnaires (QLQ-C30, HADS-D, FPZ). Self-assessment is correlated with the doctors risk factor analysis on the one hand and with the psycho-oncologists expertise on the other hand. The final evaluation is supposed to show how the initial integration of psycho-social data changes patients quality of life during hospital stay. First results of this integrated screening program will be presented at the conference.

86 - THE SCALES OF PSYCHOLOGICAL CAPACITIES (SPC): MEASURING CHANGE IN PSYCHIC

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The paper outlines the requirements for an outcome instrument measuring mode-specific changes after psychotherapy. The "Scales of Psychological Capacities" (SPC) are introduced as a new measure of psychic structure and - by repeated measurements - structural change as the mode-specific effect of psychoanalytic psychotherapy. Design and results of an interrater reliability study, a convergent and discriminant validity study with well established construct-near and construct-distant measures (validity study I), a discriminant validity study with different diagnostic groups (validity study II) as well as studies on stability and sensitivity to change are presented. The reliability study was performed with a sample of 38 and the validity study I with a sample of 47 depressed patients; in validity study II 36 depressives are compared with 33 borderline patients and 36 healthy controls. Stability was investigated using the test-retest reliability method with a sample of 20 depressed patients, and sensitivity to change with a sample of 42 depressed patients by means of a pre-/post comparison of psychoanalytic long-term psychotherapy, an intervention known to bring about structural change. The results yielded substantial evidence that the SPC are a reliable (mean intraclass correlation coefficient .82) and valid measure of psychic structure. The test-retest study showed no significant change, and a stability-coefficient for the SPC-total-score of .88, thus demonstrating stability of the test. The sensitivity to change of the SPC was very satisfactory, yielding an effect-size of 1.84 for the SPC-total-score. This result was also clinically significant for 81% of the patients (using the reliable change index), when compared with 60 healthy controls. These psychometric studies confirmed our assumption that the SPC are a suitable instrument for psychoanalytic process-outcome research.

228 - THE ASSOCIATION BETWEEN CHILDHOOD ADVERSITY AND FREQUENT CONSULTATIONS IN MEDICAL OUT-PATIENTS IS MEDIATED BY THE NUMBER OF BODILY SYMPTOMS ATTRIBUTED TO THE ILLNESS AND DEPRESSION SEVERITY

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Background: We assessed whether depression, health anxiety or illness beliefs mediated the relationship between childhood adversity and frequent medical consultations among new out-patients at neurology, cardiology and gastroenterology clinics. **Method:** At first clinic visit we recorded: Hospital Anxiety and Depression scale (HADS), Illness Perception Questionnaire (IPQ), Health Anxiety Questionnaire and Symptom Amplification Scale. Subjects were interviewed using the Childhood Experience of Care and Abuse Schedule. Outcome measure was the number of medical consultations for 12 months before and 6 months after the index clinic visit, recorded from medical records. Multiple regression analysis was used to determine mediators. **Results:** 129 patients (61% response) were interviewed; in 58 (44%) the symptom was medically unexplained. Childhood adversity was reported by 50% of people with medically unexplained symptoms and 26.4% for symptoms explained by organic

disease ($p=0.006$). Frequency of consultation was increased in single and divorced/widowed people ($p=0.002$), those of lower socioeconomic status ($p=0.001$) and in those with childhood adversity compared to the remainder (medians of 16 visits v 10; $p=0.002$). Depression, IPQ identity (number of symptoms) and health anxiety scores were potential mediators but only the first two fulfilled the criteria for mediators between childhood adversity and frequency of consultations. Sexual abuse and overt neglect were the adversities most closely associated with frequent consultations. Conclusion: The association between childhood adversity and frequent medical consultations is mediated by the number of bodily symptoms attributed to the illness and depression severity. Psychological treatments should be targeted at these patients with a view to reducing their frequent doctor visits.

177 - PSYCHOLOGICAL DISTRESS AND PSYCHIATRIC COMORBIDITY IN PATIENTS WITH ULCERATIVE COLITIS

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Background: The frequency of psychiatric disorders, the amount of psychological distress and their determination by disease related factors in patients with ulcerative colitis (UC) were assessed. **Methods:** 62 patients with UC and without IPAA (age 44.4 ± 13.9 years; 37% female) completed the following questionnaires: medical and sociodemographic questionnaire of the German Competence Network "Inflammatory Bowel Diseases" and the German version of the Hospital Anxiety and Depression Scale (HADS-D). Disease activity was measured by the German Inflammatory Bowel Disease Activity Index (GIBDIuc). Psychological distress was assessed by the HADS-D subscale scores. A probable psychiatric disorder was supposed if a patient scored ≥ 11 in at least one HADS-D subscale. A logistic regression as performed to identify possible sociodemographic and disease-related predictors (disease activity, number of extraintestinal manifestations; number of other medical diseases; number of operations; current medication [antibiotics, corticosteroids, azathioprin or infliximab, analgetics, psychopharmacological agents, probiotics, boswellia, aminosulphasalazine, antidiarrhoeals]; body mass index (BMI) <18.5 ; age, sex, current occupational status and partnership, social index; regular smoking and sports, membership in a self help organisation. **Results:** 42% patients with UC without IPAA had slight disease activity. The amount of anxiety in UC patients with silent and active disease was higher than the one of the general German population ($p<0.01$). The frequency of a probable psychiatric disorder (23%) did not differ from the general German population (17%). Patients with silent and active disease did not differ in the frequency of a probable psychiatric disorder and the degree of anxiety and depression. Logistic regression of disease-related factors predicting psychiatric comorbidity showed no significant results. **Conclusion:** UC-patients experience a higher amount of psychological distress than the general population which is yet below the cut off – values of the HADS-D indicative of a possible or a probable psychiatric disorder. Psychiatric disorders in patients with UC in remission and slight disease activity should be considered as an UC-independent comorbidity.

174 - ALEXITHYMIA AS AN IMPORTANT CONSTRUCT IN PSYCHOSOMATIC MEDICINE

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The earliest psychosomatic theories were psychoanalytic in nature. Disease specific intrapsychic conflicts were thought to underlie psychosomatic diseases. These "conflict theories", however, were later rejected as unsatisfactory. The scientific interest was shifted and focused on common personality traits of people suffering from psychosomatic disorders and symptoms. It was found that these patients commonly had difficulties in recognising and expressing their emotions. These ideas were elaborated by P. Sifenos and J. Nemiah, who, some thirty years ago, introduced the term Alexithymia. The alexithymia construct is composed of four features: difficulty in identifying feelings, difficulty in describing them, constricted imaginal processes and externally oriented cognitive style. Alexithymia seems to be associated with many somatic diseases. In clinical work it is important to recognise patients' alexithymic features. Still, there are many open questions about alexithymia concerning its aetiology, assessment and relation to many psychiatric disorders. These

shortcomings are at least partly due to various methodological biases in the earliest studies. More studies using representative samples with valid assessment methods (for both alexithymia and the somatic diseases and psychiatric disorders studied) are needed, with prospective longitudinal

180 - PSYCHIATRIC DISORDERS IN PATIENTS WITH SOMATOFORM PAIN

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Background: Research on psychiatric comorbidity patients with chronic pain disorder yielded inhomogeneous results. While in most studies Mood Disorders and Anxiety Disorders seems to be common in these patients, estimates for prevalences of Personality Disorders range considerably. An exact definition of the population studied is missing in most of the studies. Most samples are mixed with patients with different chronic pain conditions and therefore heterogenous. Additionally, different diagnostic instruments were used and patients were recruited in different settings. Only few studies are addressed to somatoform pain conditions, for whom a high impact of psychiatric disturbance is considered. **Objective:** To investigate the prevalence rates of the DSM-IV axis-I and Axis-II disorders in patients with somatoform pain disorder. **Method:** N = 350 patients diagnosed as persistent somatoform pain disorder (ICD-10 F45.4) or Somatization Disorder (ICD-10 F45.0) with pain as the main complaint were interviewed with the German version of SCID-I and -II. Psychiatric diagnoses were made according to the criteria specified in DSM-IV. **Results:** In this largest sample of somatoform pain conditions to date, Mood Disorders (i.e. Major Depression and Dysthymic Disorder) are the most frequent comorbid condition followed by anxiety disorders. Personality disorders are diagnosed in about 20% of these patients, with Cluster-C disorders prevailing. Implications for the psychotherapeutic approach in these patients are outlined.

118 - PSYCHOSOCIAL CARE IN PRENATAL DIAGNOSTICS

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One of the most important aims of prenatal diagnostics is to exclude tentative diagnoses based on a screening test or derived anamnestically from the birth of a sick child. One outcome of further developments in prenatal diagnostics is the increased opportunity for fetal anomalies to be precisely diagnosed and the prognosis assessed in the first and second trimesters of pregnancy. With many disorders, however, the opportunities for prenatal therapy are still limited. Many parents are unaware that their opting for prenatal diagnostics entails the possibility of being confronted with the diagnosis of a severe fetal anomaly and consequently having to make a decision on whether to carry the child to term or to have the pregnancy terminated. An overview of psychosomatic care in prenatal diagnostics is followed by a presentation of the results of a retrospective ($n=80$) and a prospective ($n=35$) longitudinal study of women who opted for a termination of pregnancy in the second trimester due to fetal anomaly. The prospective comparison of the 35 women after termination of pregnancy with 30 women after the spontaneous birth of a term child shows that the women after termination of pregnancy were suffering significantly more often from traumatic symptoms, depression and anxiety as long as 14 months after the termination. The results of the retrospective study show that intensive grief reactions and a high degree of traumatic experience can still be detected some years after the termination of pregnancy. Taken together, the results show that psychosomatic care in prenatal diagnostics is necessary and meaningful for preventive reasons too.

119 - COPING WITH A PREMATURE BIRTH:

RESULTS OF A 14-MONTH FOLLOW-UP Kersting A, Dorsch M, Hörmig-Franz I, Wesselmann U, Arolt V. Department of Psychiatry, Münster, Germany

For parents, the premature birth of a child is a traumatic life event for which they often have no time to prepare. Only few studies, all of them based on single-point measurements, have recorded the extent of posttraumatic symptoms in mothers after premature birth. To date, no prospective longitudinal studies on the traumatic experience of mothers after premature birth have been published in the scientific literature.

The aim of the study was to register the extent and the course of posttraumatic symptoms in mothers after the birth of a very small preterm infant. Methods: In a prospective longitudinal study, 50 mothers whose children had been born before completion of the 32nd gestational week and/or with a weight of less than 1500 g were interviewed at three measuring timepoints (1st-3rd day pp, 14 days pp, 6 months pp, and 14 months pp). The measuring instruments covered the posttraumatic symptoms (IES-R), the psychiatric diagnosis (SKID Interview), and the extent of depressivity (BDI, MADRS) and anxiety (STAI, HAMA). The control group comprised 30 mothers after the complication-free spontaneous birth of a healthy child. Results: At all measuring timepoints, the mothers of the premature children recorded significantly higher scores for traumatic experience and depressive symptoms than the mothers in the control group. In contrast to the mothers in the control group, no significant reduction in posttraumatic symptoms and depressivity was recorded for the mothers of the preterm infants even 14 months pp. Conclusions: The results indicate that the situation of a mother after premature birth is a complex traumatic event persisting for a prolonged period. The broad extent of depressive symptoms in the mothers investigated in this study reflects the stress to which a mother is subject after the birth of a preterm infant. Psychotherapeutic care for some mothers seems advisable even beyond the immediate postnatal period.

201 - COMPARISON BETWEEN MAJOR DEPRESSIVE DISORDER & HWABYUNG (CULTURE BOUND SYNDROME) USING THE SCL-90-R Jongwoo Kim, Sunyong Chung, Junghye Kwon, Dongkun Park, Leeheon Kang, Minsoo Lee. Oriental Neuropsychiatry in Kyunghee University, Psychology & Psychiatry in Korea University, Seoul, Korea

Hwabyung is a Korean culture bound syndrome and translated as anger syndrome at DSM-IV. And it is caused by the suppression of anger and has characteristics of chest discomfort, burning up as physical symptoms, and mortification, chagrin as psychological symptoms. It is very common in the field of psychiatry in Korea with Major Depressive Disorder (MDD). * Objective : 95 patients with MDD or Hwabyung, who visited the department of psychiatry in Korea University Medical Center or oriental medical hospital of Kyunghee Medical Center from May 2003 to August 2003, were selected for the study to compare between Major Depressive Disorder and Hwabyung. * Methods : The Structured Clinical Interview Schedule for DSM-IV (SCID) and Hwa-Byung Diagnostic Interview Schedule (HBDIS) were conducted for diagnosis. And Symptom Check List-90-Revised (SCL-90-R) was carried out for comparison between MDD and Hwabyung. * Result : Among the 95 patients, MDD group was 23 persons, Hwabyung group was 36 persons, and MDD plus Hwabyung group was 36 persons and it occupied 37.9%. MDD plus Hwabyung group had higher scores than any other groups in the whole dimensions of SCL-90-R. Hwabyung group had higher scores than MDD group in somatization, obsessive-compulsive, interpersonal-sensitivity, anxiety, hostility and Global Severity Index(GSI) ($p < .001$) of SCL-90-R, but two groups had no difference in depression, phobic anxiety, paranoid ideation, psychoticism of SCL-90-R. * Conclusion : These result showed that Hwabyung is similar to MDD at the point of depression and psychoticism but more severe at somatization, anxiety and anger than MDD. Thus, we suggest to study psychosomatic medicine with cultural backgrounds.

5 - DISEASE RELATED DETERMINANTS OF ANXIETY AND DEPRESSION IN CHRONIC LIVER DISEASE

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Background and aims: Within the biomedical model anxiety and depression in chronic somatic diseases are considered to be determined by the severity of the somatic disease. We tested if the amount of anxiety and depression measured by the German version of the Hospital Anxiety and Depression Scale HADS-D can be predicted by variables of the liver disease and active medical comorbidities. Methods: 204/255 (80%) consecutive patients of a tertiary care center [age 52.7 ± 13 , 9 years, 49% female; 92 P. (45%) without cirrhosis, 45 P. (22%) cirrhosis Child - Pugh A, 31 P. (15%) Child- Pugh B and 35 P. (17%) Child - Pugh C and with 66 P. (32%) alcoholic, 107 P. (53%) chronic viral hepatitis and 31 P. (15%) with other etiologies] were investigated by a set of standardized validated questionnaires and

medical diagnostics and therapy dependent from the current complications of the liver disease. The following variables were entered into multiple regression analysis with p in and out = 0.05: Etiology of liver disease (Alcohol, chronic viral hepatitis, other etiologies), severity of liver disease (no cirrhosis, cirrhosis Child-Pugh A, B and C), actual liver associated diseases (varices, hepatocellular carcinoma HCC), admission because of acute complications (gastrointestinal bleeding requiring interventional endoscopic therapy, bacterial peritonitis, encephalopathy grade II and more), pharmacological therapy of liver disease by interferon IFN, beta-blocker because of esophageal varices and diuretics because of ascites. Active medical comorbidity was defined as somatic disease noticed as well as by the patient and by physicians' notes requiring medical treatment. Results: 67/204 patients (32.8%) scored ≥ 11 on either depression or anxiety subscales indicating possible psychiatric disorder with. The mean of the anxiety score was 6.6 (SD 4.8) and of the depression score 6.7 (SD 5.0). Of the 20 variables entered none could substantially predict the amount of anxiety and depression. Conclusion: The amount of anxiety and depression (dimensional model of psychiatric distress) is independent of the severity, complications and medical comorbidities in patients with chronic liver diseases.

138 - DEVELOPMENT OF A COMPUTERIZED ADAPTIVE TEST FOR STRESS (STRESS-CAT)

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Research Question: The goal of medical treatments to maintain and improve subjective well-being of patients has to be evaluable and measurable. Questionnaires administered for evaluating treatment effects are based on classical test theory (CTT), presenting all subjects the same standard set of questions regardless of their response pattern. In contrast to that the 'Item Response Theory' (IRT) offers the opportunity of developing 'Computerized Adaptive Tests (CAT)' allowing for selecting items being 'tailored' to the individual response pattern. The study aims to develop and validate computer-adaptive tests (CAT) to measure the perception of stress. Psychological stress concepts emphasize the individual perception and appraisal of a situation as stressful. Measuring perceived stress has concentrated on two basic dimensions, environmental stressors and stress reactions. Methods: 1092 psychosomatic patients (69.7% female, 42.4 ± 14.5 years of age) answered 140 items out of 4 validated stress questionnaires (PSQ, TICS, ABF, SUB) within their diagnostic routines. Results: 5 independent reviewers rated 47 out of the available 127 items as representative of the stressor dimension and 39 as representative of the stress reaction dimension. Exploratory factor analyses yielded two dimensions, stressor and stress reaction. All items underwent six steps of analyses to check for the assumptions of unidimensionality, local independence and item discrimination, using the programs Mplus, TestGraf, SAS, and Parscale. The Generalized Partial Credit Model could be applied, showing a good model fit. The CAT scores were estimated using an 'expected a posteriori' algorithm (EAP). We could demonstrate the latent trait (stress) can be estimated with approximately 7 items ± 2 items (mean \pm sd) on a highly precise level (reliability $\geq .90$) with high correlation to established instruments based on classical test theory. Accordingly the absolute number of items could be substantially reduced (-31% to -77%) without loss of major information and with improved measurement precision in high and low score ranges. Conclusion: Measuring stress in the clinical field can be done at the same time economically and with high precision using a individually 'tailored' computer adaptive test.

297 - TEACHING OF PSYCHOSOMATIC MEDICINE AND PSYCHOTHERAPY IN THE DRESDEN DIPOL@-CURRICULUM

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A federal law, the "Approbationsordnung für Ärzte", regulates Medical education in Germany. In 2002 a revised version of this law demanded the faculties of medical to implement interdisciplinary and problem-based (PBL) courses in their curriculum. Already in 1998 the Faculty of Medicine of the Dresden University decided to reform the

traditional curriculum. The reform-curriculum is being created in close co-operation with the Harvard Medical School. It is a hybrid curriculum retaining traditional elements as lectures and bedside teaching with PBL-tutorials and a special doctor-patient-communication-training, which is based on role-play exercises. Psychosomatic Medicine is toughed together with neurology and psychiatry as a major topic of the 7,5-week PBL-course "Nervous System and Psyche" but their are also lectures and special skillstraining exercises in other PBL-courses like "Oncology" or "Emergency medicine". Doctor-patient-communication and – relationship is a major topic of the whole curriculum, which is toughed in skillstraining exercises, peer-groups on history taking (Anamnesegruppen) and Balint-groups. Data of the external evaluation showed, that the students accepted psychosomatic topics of the curriculum very well. This presentation describes concept, implementation and evaluation data of the PBL-course "Nervous System & Psyche".

44 - QUALITY OF LIFE IN PATIENTS WITH ACNE

VULGARIS Kotrulja, L., Sjerobabski-Masneć, I., Vurnek, M.
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Acne vulgaris is a common inflammatory dermatosis capable of producing psychological and physical scarring. It is common for patients to develop psychological problems as a consequence of their condition, such as low self-esteem, social phobias, depression, anxiety, suicidal thoughts, and lowered quality of life. Self assessment of acne severity is often more severe than dermatological clinical evaluation which is very important fact in understanding the necessity of individual approachment to the patient. Isotretinoin is the drug which is indicated in the treatment of severe form of the disease, but lately it is also suggested in moderate form of acne with prominent cicatricial liability or when the disease has strong psychological impact on patients life. Last 15 years some data of possible association with depression and suicidal tendency during treatment with isotretinoin appeared. In our Clinic a prospective clinical trial is in course in which standardised psychometric questionnaires (APSEA, DSQL, BDI, STAI, MPS) and psychological interview are used in order to evaluate psychological status of patients and the influence of isotretinoin on patients during treatment of acne vulgaris. **CONCLUSION:** The overall results show that patients with acne suffer from psychosocial problems caused by their disease, but the impairment depends less on the objective severity of acne and more on the patient's perception of the condition. Therapeutic interventions improve quality of life in acne patients, from both objective and subjective point of view. Isotretinoin has showed no influence on symptoms of depression and anxiety.

270 - DELAYED WOUND HEALING AND

EMOTIONAL TRAUMA Küttemeyer M, Rainer K, St. Agatha's Hospital, Psychosomatic Department, Cologne, Germany

Since 1990 patients with chronic wounds in the plastic-surgery department of our hospital have been examined and treated psychosomatically. Methods: Biographical anamnesis, psychosomatic visits an subsequent talks. Results: All patients (n=30) are suffering from an „emotional wound“, i.e. a concealed family trauma and a symbiotic attachment to their relatives. In 11 Cases the physical wound healed without renewed surgical intervention after the subjects had been able to open up verbally and emotionally. In 3 cases, a new attempt to cover the wound with grafted skin was successful. In another 8 cases the revelation of the biographical traumas was accompanied by vigorous reactions (anxiety or rage attacks) associated with relative improvements of the wound condition. The other 8 patients merely indicated traumatic experiences seemingly without emotional reaction and until dismissal without changes to the wounds. Katamnesticly however 3 of these patients showed complete healing of the wound. Summary: Delayed wound healing may be a sign of emotional traumatization. Revealing the traumatic experience an processing it emotionally – when embedded and protected in a therapeutic relationship and in the acceptance of the whole surgical staff – may drastically improve the condition of the wound.

29 - SIGMUND FREUD'S FORGOTTEN DIAGNOSTIC

MANUAL Küttemeyer M, Dep. Psychosomatics, St. Agatha's Hospital, Cologne, Germany

The most useful tool for clinical diagnosis of hysterical and other psychogenic disorders elaborated by Freud between 1886 and 1893 is unknown both in general medicine and even in psychosomatics. The most important paper in French about the difference between hysterical and organic palsy (Freud 1893c) translated in English for the Standard Edition, has not been considered worth translating in German before 1998. Hysterical conversions and other psychogenic syndromes (ICD-10: dissociative and somatization disorders) are recognizable, according to Freud, by special – psychodynamically understandable – clinical signs: they show excessive manifestation (e.g. *analgesia*, excessive tremor/pain/dizziness/palsy), equivalent to the intensity of the accumulated underlying affects, preference of sudden begin and manifestation in attacks on account of sudden breakdown of defence, nonanatomic localization (e.g. nonradicular radiation of pain, hysterical palsy/tremor proximally accented and not distally like the cerebral or radicular palsy/the extrapyramidal tremor), no response to medicaments (e.g. analgetics useless against psychogenic pain) and exacerbation after invasive interventions. The Knowledge of this manual could contribute to early clinical diagnosis, without and before knowing exactly the unconscious conflict. The relevance of the manual for general medicine, neurology, psychosomatics and psychoanalysis will be demonstrated.

30 - CUMULATED FATIGUE AMONG TEENAGERS IN

POLAND Kulik A, Szewczyk L. Dept. of Clinical Psychology of Children and Adolescents, Lublin, Poland

Cumulated (chronic) fatigue is characterized by not explained, prolonged fatigue, which does not stop even after the longer rest. Fatigue results in the limitation of physical and cognitive activities and, apart from that, fatigue limits spheres and areas of exploration. Different somatic symptoms accompany cumulated fatigue too. The aim of the presented research was to estimate the frequency of the occurrence of cumulated fatigue among Polish teenagers. The Questionnaire of Cumulated Fatigue by R. Kosugo in Polish adaptation by A. Kulik and L. Szewczyk was used in order to estimate the intensification of the occurrence of cumulated fatigue. 997 of persons (455 boys and 540 of girls; in two tests the sex of participants wasn't stated) were examined. The participants of the tests were 13 to 19 years old. About one-eighth of older boys and one-tenth of younger ones bring to light the difficulties connected with fatigue. The data suggest the existence of the serious difficulties among about one-second older girls and about one-fourth younger ones. Conclusion: cumulated fatigue in Polish population concerns about 20% of teenagers (more often girls than boys). Very high intensification of cumulated fatigue refers to about 3% of teenagers. The obtained results suggest, that the fatigue features more often are found among older girls and seldom among younger boys.

25 - CUMULATED FATIGUE AND SHYNESS Kulik A,

Szewczyk L. Dept. of Clinical Psychology of Children and Adolescents, Catholic University of Lublin, Poland

Cumulated (chronic) fatigue and shyness are the two different types of behavior disorders. Although, clinic images of those phenomena differ, we can indicate certain common features. The above mentioned features are composed of activity reductions (interpersonal troubles, inhibition), the occurrence of physiological symptoms, and the enlarged temperamental excitability. Is it possible to talk about any connection between shyness and chronic fatigue? If yes, what is the nature of it? The answers to those questions have become the goal of the presented studies. Empiric materials were used in the analysis. The beforehand mentioned empiric materials were gathered among adolescents aged between 16-18 on the basis of followed methods: Questionnaire of Cumulated Fatigue by R. Kosugo, Questionnaire for the Pupil by B. Harwas-Napierała. The gained results indicate correlation between fatigue and general shyness ($r=0,653$ $p<0,001$), private shyness ($r=0,543$ $p<0,001$), public shyness ($r=0,573$ $p<0,001$), self-consciousness of shy ($r=0,35$ $p=0,001$). Shyness in general explains 42,6% of cumulated fatigue. The bigger growth of shyness (as far as intensity and the number of shy teenagers are concerned) occurs among adolescents with the high level of fatigue. Among adolescents with the low fatigue, on the other hand, no persons with the high shyness were found. Conclusions: 1) the higher level of shyness is the

bigger cumulated fatigue occurs 2) shyness both private and public are in relationship with cumulated fatigue 3) self-consciousness of shy is reasonable important for fatigue.

262 - BLOOD COAGULATION AND MENTAL STRESS

Kunzendorf S, Benninghoven D, Harms C, Ripke A, Jantsche G, Psychosomatik, UK-SH, Campus Lübeck, Germany

Background: The influence of mental stress on blood coagulation had been shown in several studies including investigations of our own research group. One of our main findings is that more elevated reactions of the coagulation system can be found in subjects with higher levels of anxiety. To further investigate this preliminary finding we performed the present study with psychosomatic inpatients from our department in Lübeck. **Method:** Psychosomatic inpatients with somatisation or anxiety disorders (n=29) who had an increased level of anxiety according to the State-Trait-Anxiety-Inventory (STAI) and healthy control subjects (n=21) participated in a standardized mental stress induction method: In front of a one way mirror and with video-recording the subjects were supposed to reproduce a difficult text which they had read some minutes before. We controlled the activation of the following clotting markers: thrombin-antithrombin complex (TAT), prothrombin-fragments F1+2, fibrinogen, D-dimer, plasminogen activator inhibitor (PAI), platelet factor 4 (PF4), beta thromboglobulin (Beta-Tg), CD 62 and CD 63. Blood pressure, heart rate and mean arterial pressure (MAP) were recorded as objective stress markers. The subjective perception of the stress event was assessed by the "Befindlichkeitsskalierung anhand von Kategorien und Eigenschaftswörtern" (BSKE, Jahnke et al 1999). **Results:** The stress induction procedure was successful in both groups according to the MAP and BSKE. The patient group was significantly more anxious than the control group according to the STAI. Patient and control group differed significantly in plasmatic clotting factors F1+2 and PAI and in platelet markers PF4 and Beta-Tg. **Discussion:** The results suggest an influence of anxiety on the activation of the blood coagulation system. This can be interpreted as a link between psychosocial factors and the development of chronic cardiovascular disease

271 - RATING OF PSYCHOSOCIAL STRESS IN PATIENTS WITH INFLAMMATORY BOWEL DISEASE

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Background: The Luebeck semistructured Interview for Psychosocial Screening (LIPS) was successfully tested in 200 patients after acute myocardial infarction. Validity was demonstrated by significant correlations ($r = .5-.6$) with standard self report questionnaires (HADS, STAI, BDI). In the present study an adapted version of the instrument was applied to patients with inflammatory bowel disease. Due to the finding that psychosocial stress in ibd-patients is related to disease activity, the LIPS validated not only in terms of correlations with self report instruments but also with indices of disease activity (CAI, CDAI). **Method:** The LIPS serves as a rating tool for psychosocial stress. Depression, anxiety, perceived social support, vital exhaustion, and subjectively perceived impairment are rated on five point likert scales by medical doctors or research assistants during a regular intake interview. The whole interview takes about 10 minutes. **Results:** Practicability, reliability and validity were confirmed. Correlations of .5-.6 with self report instruments were comparable with those found in our study with patients after acute myocardial infarction. Ratings of depression and perceived impairment were highly correlated with indices of disease activity. Interrater reliability was also good. **Discussion:** The LIPS was found to be a suitable instrument for daily clinical routine. Medical doctors in primary care can easily be introduced to the method. Further applications to additional somatic diseases are developed at present.

266 - ASSOCIATION OF PSYCHODIAGNOSTIC PARAMETERS WITH PAIN PERCEPTION OF INTRACARDIAC SHOCK DISCHARGES

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Background: Pain caused by intracardiac shock discharges is an important clinical issue in the treatment of patients with implanted

cardioverter defibrillator (ICD). The aim of the present study was to examine whether the perception of these pains are influenced by various psychodiagnostic parameters. **Methods:** A total of 77 patients (69 men, median age 60 years) drawn from the outpatient clinic of the German Heart Center Munich with perceived shock experiences were included in the present analysis. Pain perception was measured by a scale ranged from 0 to 100% and dichotomized with the upper tertile as cut-off point. Multivariate logistic regression analysis was used to assess the effect of psychodiagnostic parameters on pain perception of the last intracardiac shock discharge. **Results:** The mean pain perception was 58.3% (SD 27.1%). No significant association was found to sex, age, cardiac diagnosis or number of previous shocks. Patients living alone or with an ICD therapy starting less than one year had a significant increased risk to suffer pain by the last shock. Adjusted for these two characteristics by logistic regression analysis, depressive symptoms (HAD-S), anxiety (SCL-90), limitations in daily life, feelings of helplessness and PTSD (assessed by IES) were significantly related to a higher level of pain perception. **Conclusions:** Pain perceptions of shock discharges are correlated with depressive and anxious symptoms.

186 - GLOBAL PSYCHOLOGICAL STRESS AND SOCIAL SUPPORT 3 YEARS AFTER SOLID ORGAN TRANSPLANTATION

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Subjective well-being and perceived adequate social support are important hallmarks of successful organ transplantation. We performed an explorative transversal investigation of patients three years after heart or liver transplantation. We were interested in clinical and sociodemographic data and asked for somatic and mental symptoms by using the SCL-90-R and for perceived social support by the F-SozU (14-item version). 36 patients (of n=52; 69.2%) answered to our mailed questionnaires (6 female, 30 male; median age: 62 yrs). 26 patients (72.2%) were living with a partner. Quality of life was rated as sufficient (median). In the SCL-90-R, 22 (61.1%) patients showed no (GSI<60), 5 (13.9%) mild and 9 (25%) severe global stress (GSI≥60). Patients with normal GSI displayed better social support (percent score: 60) than patients with higher GSI values (percent score: 34; German normal values: 42). The differences in perceived social support failed to reach significance (t-test, $p=0.08$, niveau of significance: 95%). Our results suggest that at least a fifth of patients three years after heart or liver transplantation display psychological strain. Social support seems to play an important role for the level of perceived mental stress. There may be a negative correlation between perceived strain and social support. Our results, although gained with a small sample of patients, have important implications for clinical practice. Relatives of patients after transplantation of a solid organ should be included in psychosomatic aftercare.

110 - ARE PERSONALITY - BLOOD PRESSURE LINKS STABLE OVER A TEN YEAR PERIOD

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Personality traits have been shown to remain moderately constant throughout adulthood. Previous research has shown stability coefficients of .25 and .35 in longitudinal studies spanning 45 and 50 years. Our research extended this work by testing whether blood pressure-personality associations were similar when measured twice, with a ten-year interval between them. The personality measures were selected because they had previously shown statistically significant associations with blood pressure. At year one (T1) 334 participants completed 24-hour ambulatory blood pressure monitoring (ABPM) and personality questionnaires. After ten year (T10), 112 participants returned to complete the same battery of tests and 24-ABPM. Stability coefficients for measures of depression (using the Beck Depression Inventory), hostility (Cook-Medley Hostility Questionnaire), self-deception and impression management (Balance Inventory of Desirable Responding - Self Deception/Impression Management) between T1 and T10 were r 's = 0.35, 0.55, 0.26 and 0.41. Because these results demonstrated moderate stability of the personality traits of the participants, the associations between personality and blood pressure were analyzed and compared. The results of this analysis are summarized in the table below. Stability of personality over 10years (correlation coefficients)

Systolic BP T1 Systolic BP T3

Diastolic BP T1	Diastolic BP T3		
BDI .215	.299	.237	.306
CMHQ .221	.139	.077	.164
BIDR-SDE	.003	-.024	-.089
.003			
BIDR-IM -.221	-.009	-.042	-.006

The pattern of associations between blood pressure and personality traits was remarkably stable over 10 years. There was a strong correlation between depression and both systolic (.22 and .30) and diastolic (.24 and .31) blood pressure at T1 and T10. Hostility also correlated with systolic (.22 and .14) and with diastolic pressures (.08 and .16) over the 10-year period. BIDR-SDE is not significantly correlated with blood pressure, and finally the BIDR-IM and systolic blood pressure were inversely related (-.22) but only at T1. As shown elsewhere in the literature, personality traits are stable across the adult lifespan and this supports the use of personality as a predictor for long-term blood pressure changes. Blood pressure levels correlated with measures of depression and hostility but not with response style measures. More research is needed in order to make causal inferences about these relationships.

247 - WOMEN WITH CHRONIC LOW ABDOMINAL PAIN: A RANDOMISED CONTROLLED TRIAL OF THE EFFECT OF COGNITIVE BEHAVIOR

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Objective: Chronic low abdominal pain (CLAP) is a common gynecological problem which is poorly understood and difficult to treat. It resembles other conditions of chronic pain in the respect that investigation seldom reveals ongoing somatic disease. The purpose of the study was to determine whether Cognitive Behavioural Therapy (CBT) combined with Mensendieck physiotherapy (MP) or Mensendieck physiotherapy alone improved standard gynecological treatment (SGT). **Method:** 60 female patients with idiopathic CLAP were randomised to SGT, SGT and MP or SGT, MP and CBT. CBT consisted of ten sessions during a 12 week period aimed to change dysfunctional thinking, pain behaviour and to reduce emotional stress. Systematic desensitization and muscle relaxation were included. MP consisted of ten sessions of treatment enhancing respiration, movement, gait and relaxation. All patients filled in an extensive psychometric test battery and a pain VAS scale. The patients were reassessed 12 months after treatment by an independent rater, blind to randomisation. **Result:** Our findings suggest that patients with CLAP in both intervention groups have significant less pain as measured on a VAS pain score, after one year follow-up. A multidisciplinary approach was beneficial for some outcome measures. Most patients receiving CBT reports enhanced quality of life after treatment, more functional coping skills and improved relationship with partner. **Conclusion:** A clinical significant number of patients not responding to standard gynecological treatment for chronic low abdominal pain improved significantly after receiving treatment by a multidisciplinary approach.

306 - CHALLENGING DOCTOR-PATIENT ENCOUNTERS AND SOMATOFORM DISORDERS. A PILOT STUDY.

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Patients with combined physical and emotional complaints felt to be unexplained by their physicians, in spite of thorough examination using the most modern medical technology are often experienced as very demanding and "difficult". More knowledge and understanding as for how these patients and their physicians relate and respond to each other, how they are treated and how they might be better managed has the potential for relieving much suffering, economizing on health services and improving quality of care. A pilot study at the Department of Psychosomatic Medicine, Rikshospitalet, Oslo in collaboration with Institute for Behavioural Medicine, University of Oslo and under the supervision of Prof. Don Lipsitt Harvard Medical School, USA was undertaken. The aim was to investigate both patient and specialist consultant (SC) expectations in the consultation meeting with "difficult" patients, and also that of the referring general practitioner (GP). The expectations of patients, referring GPs and SCs were

registered as well as satisfaction with the consultation by the patient, referring GP and SC. Character traits of the patient referred on in literature as self-defeating were recorded and the degree to which the patient somatized complaints. Patients completed a 15 item Somatic Symptom Severity Scale and a Patient Request Questionnaire before the consultation and a Satisfaction Inventory and Patient Experience Questionnaire afterwards. Referring GPs and SCs completed a Difficult Doctor-patient Relationship (Hahn's) Questionnaire and M.I.N.I plus International Neuropsychiatric structured interview version 5.0.0 was used by the SCs to screen for somatoform disorders. Fifteen patients were included consecutively by SCs at the Psychosomatic department according to informed consent. Patients with long lasting somatoform complaints seemed to be "difficult" for general practitioners but not for specialist consultants. A discrepancy between patient and SCs in opinion of somatic needs seemed to make patients less satisfied with the consultation and thus more "difficult". Consultation expectations and somatic needs should be clarified in order to obtain patient satisfaction and a good therapeutic alliance, thereby improving the quality of health care.

287 - ARE SEROTONIN AND NOREPINEPHRINE THE KEY TO COMPLETE SYMPTOM RESOLUTION?

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Aims: 1) Define the goal of depression treatment and current treatment outcomes. 2) Discuss how 5-HT and NE function in regard to emotional and physical symptoms. 3) Discuss the relationship of treating both emotional and painful physical symptoms to achieving remission. Research has shown that while either the serotonin (5-HT) or norepinephrine (NE) systems can be disrupted in depression, both work together in relaying physical symptoms to the brain. Clinical research has found that tricyclic antidepressants (TCAs) that work on both systems produce better results in treating both depression and chronic pain. Augmentation of existing SSRI therapies with NE-acting agents has also produced better results in depression treatment. This observation has led to the search for a new class of antidepressants that can act on both 5-HT and NE, thus addressing both physical and emotional symptoms, but without causing the troubling side effects of TCAs. Studies thus far on this class of drugs, the serotonin norepinephrine reuptake inhibitors (SNRIs), have shown increased efficacy on both reducing the physical symptoms of depression and increasing the number of patients who reach a state of remission.

221 - ALEXITHYMIA: EMOTIONAL STIMULATION AND NEURONAL ACTIVITY IN FMRI

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Background: Alexithymic traits are often associated with psychosomatic diseases and are discussed as decisive factors in the aetiology of Somatoform Disorders. Characteristic features are disturbances in recognizing and communicating emotions. Neurobiologically oriented hypotheses discuss the cause as functional alterations of specific brain regions, which are involved in recognizing and regulating emotions. This hypothesis is tested and the brain-regions which are involved should be identified. **Methods:** Out of hospitalised patients with psychosomatic diseases 10 men with a high score (HA) and 10 with a low one (NA) on the TAS-20 were scanned with fMRI during emotional stimulation which included pictures which were neutral or provoking anxiety and disgust. Because of the postulated gender differences in fMRI, only men are tested. **Results:** As a response to negative affect aroused by visual stimulation HA in comparison to NA showed a lower activation in the right medial prefrontal cortex and in the right amygdala. The differences were statistically significant for emotion disgust. **Discussion:** The results support the existence of specific regional neuronal patterns of activity when negative emotions are processed. Especially the lack of frontal activation (Cingulum, medial prefrontal cortex) of HA confirms the assumption that alexithymia is a disturbance of the emotional processing structures.

33 - POSTTRAUMATIC EMBITTERMENT DISORDER

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Adjustment Disorders are frequent mental illnesses, but they are insufficiently defined. An exception is PTSD where a life-threatening event is required to cause prolonged states of anxiety with intrusive thoughts. There is another class of life events which are perceived by the subject not as life threatening but instead as unjust and/or humiliating and which also lead to prolonged mental disorders in the sense of embitterment rather than anxiety. This disorder can be called „Posttraumatic Embitterment Disorder PTED“). Core Diagnostic Criteria of PTED are:

- A single exceptional negative life event precipitates the onset of the illness.
 - Patients know about this life event and see their present negative state as a direct and lasting consequence of the event.
 - Patients perceive the negative life event as „injust“.
 - Patients respond with embitterment and emotional arousal when reminded of the event.
 - Patients report repeated intrusive memories of the critical event. For some part they even think that it is important not to forget.
 - Emotional modulation is not impaired and patients can show normal affect when distracted or even can smile when engaged in thoughts of revenge.
 - No obvious mental disorder in the year before the critical event.
- The present state is no recurrence of a pre-existing mental disorder.

Additional signs and symptoms are:

- Patients can perceive themselves as victim, helpless and unable to cope with the event or the cause of the event.
- Patients can blame themselves for the event, for not having prevented it from happening or for being unable to cope with it.
- Patients can express thoughts that it does no longer matter how they are doing and are even uncertain whether or not they want their wounds to heal.
- Patients can express suicidal ideation.
- Additional emotions can be dysphoria, aggression, downheartedness, resembling melancholic depressive states with somatic syndrome.
- Patients can show a variety of unspecific somatic complaints such as loss of appetite, sleeping disturbances and pain.
- Patients can report phobic symptoms in respect to the place or persons related to the event
- Drive can be reduced and blocked. Patients experience themselves not so much as drive inhibited but rather as drive unwell.

46 - MENTAL HEALTH IMPACT OF WAR AND

VIOLENCE Lindert J, Blettner M, Lamott F, Traue H. IMBEI, University of Mainz, Germany

Introduction: Evidence is emerging that mental disorders are common in post-war populations and organised violence has emerged as an important issue at the forefront of public health concerns, but the epidemiology of violence related disorders is still an under explored field. Epidemiological studies in violence torn populations face a lot of problems, but the DSM can serve as a heuristic concept. Objectives: To provide prevalence estimates of mental distress like posttraumatic stress disorder, depressiveness, anxiety and culture specific symptoms of mental and somatic disorders and to determine relationships between experiences of organised violence and mental distress and mental disease symptoms. Methods: Cross sectional survey in an ethnic homogeneous non-clinical sample using the;Harvard-Trauma-Questionnaire; and the;Hopkins-Symptom-Checklist; and ethnographic methods. Results: Serious forms of distress were found.

242 - UNFINISHED MOURNING AND SOMATIZATION

Makhashvili N. Georgian Center for Psychosocial and Medical Rehabilitation of Torture Victims, Tbilisi, Georgia

Georgian Center for Psychosocial and Medical Rehabilitation of Torture Victims (GCRT) is implementing rehabilitation program for torture survivors since 2000. The main target groups encompass Internally Displaced Persons, Refugees from Chechnya, Persons tortured by law-enforcements agencies, also other traumatized population (e.g. domestic violence survivors, Stalin repression victims). GCRT deals with primary and secondary trauma consequences on different levels: individual, family, school and at societal/community levels. The centre is supported by funding from EC and UNVFTV. This paper is based on the working experience with a group of 17 women who represent the State Commission on Missing Persons. The program "Psychosocial Support to Families of Missing

Persons" is sponsored by the International Committee of Red Cross. The war conflict with Abkhazians has resulted in many deaths and also a large number of people who - after 10 years - is still missing (the number of Georgian families with missing member is approximately 1500). Paper discusses: problems and needs of persons with uncompleted grief, also clinical findings both on somatic and psychological levels; particulars of traumatic experience- namely, intensified active imagination will be discussed; defenses and coping strategies including denial and dissociation, also "magical thinking", common rituals and group sharing will be described; specifics of prolonged and unfinished mourning in terms of cultural context - we think that the bereavement process is aggravated due to social representative of "sorrowful mother"; the problems of attachment formation and upbringing styles in Georgian families also largely contributes to "traumatic bonding" and unaccepted loss; At last, we will try to link the severity of traumatic symptoms, adjustment/socialization process and somatization of persons who suffer from prolonged and still "open" trauma. GCRT two-faced approach and the intervention program will be presented - the program is designed for a holistic intervention at different "levels" of personality - identity, cognition, emotions, behavior, somatic level and interpersonal relations.

165 - BODY IMAGE AND EATING DISORDERS

Maximiano J, Miranda M, Tomé C, Maia T. Psychiatry Department of Amadora Sintra Hospital, Amadora, Portugal

The authors present a bibliographic revision on body image in eating disorder patients. They also explore the concept of body scheme and revise evaluation scales of body image and scheme. Furthermore, the authors approach the importance of life-experience or events in these patients and posterior influence in the construction of an adequate body image. The implication of morphological changes in body and their relation to proprioceptors adaptation and neurological structuring of the corporal scheme are also revised. The majority of studies on body image conclude that the concept is multidimensional, involving socio-cultural, historical and individual (biological, affective and cognitive variables) issues. The construction of the body image results from the subjective corporal experience and should be evaluated according to two main aspects: - Subjective (global positive or negative body attitude); Perceptive (global perception of body dimensions and estimation of body volume). The studies consider that overestimation of body size is not always present in anorectic patients, thus being a characteristic linked to the pathology of cognitive and affective corporal experience process. The authors are part of a liaison psychiatry multidisciplinary team in a psychiatry department, formed by two psychiatrists, a psychologist and a psychomotricist. The follow-up begins with psychiatric evaluation where the diagnosis and therapeutic plan is established. The patients are then referred to psychology and psychomotricity. Psychomotricity is a body mediation therapy, using the body as an instrument of emotional relation and perception. This body experience (relaxation and expressiveness) leads the individual to a better comprehension and insight of his/hers subjectivity in personal and affective history, understanding as a whole in the inter and innerindividual relation. The referral of the eating disorder patient to psychomotricity is based on body-identity cleavage, and the use of the body as an aggressive instrument to their peers. This revision will enable to consolidate knowledge in this field. In the near future the authors intend to translate, adapt and validate the evaluation scales of body image concept in eating disorder.

149 - POSTTRAUMATIC STRESS DISORDER: A VALID DIAGNOSIS FOR BREAST CANCER PATIENTS?

Mehnert A. Institute of Medical Psychology, University Clinic Hamburg-Eppendorf, Hamburg, Germany

Purpose. Since life-threatening illness was included as a potentially traumatic event in the revised DSM-IV, posttraumatic stress disorder (PTSD) has been increasingly diagnosed as an additional morbidity among cancer patients. The prevalence of PTSD differs from 0% to 35% in adult cancer patients. The aim of this prospective study is to identify acute and posttraumatic stress responses and risk factors in women with breast cancer diagnosis. Methods. Interviews were conducted with N=127 women at various disease stages (0-4) during their stay at the University Gynecology Clinic in Hamburg within an average of three days (range 0-11) after breast operation (participation: 83%) (T1). 23% had a diagnosis of recurrent cancer. We used SCID-DSM-IV modules for PTSD, Acute Stress Disorder (ASD), Major

Depression, Dysthymic Disorder, Generalized Anxiety Disorder and Adjustment Disorder. Additionally, women completed questionnaires including IES-R, PCL-C, HADS, Dealing with Illness Inventory (DWI), and Life Attitude Profile (LAP-R), among others. Six months after the interview (T2), the women were given the same questionnaires with a few additional instruments (Response rate: 78%). Results. On the basis of the SCID, prevalence rates were rather low, with 2% for each cancer-related ASD and PTSD. In these patients, the risk for a comorbid mental disorder is 22% (OR). PTSD assessed with IES-R and PCL-C were 19% at T1, and significantly lower at T2 with 11% to 16% ($p=.001$). Patients with PTSD showed higher levels of mental distress (effect sizes from 0.64 to 2.17). Depressive coping style and a lack of meaning in life were found to be the strongest predictors for posttraumatic stress in T2. Conclusions: Interviews elucidated many difficulties of assessing PTSD symptoms in cancer patients: Intrusive thoughts reported were future-oriented fears and not related to an event that has already occurred. The definition of avoidance symptoms in cancer patients remains unclear and arousal symptoms may have a strong overlap with the (side-)effects of the treatment. Overall the results suggest that breast cancer diagnosis does not lead to a high risk of cancer-related PTSD in women with no premorbid mental distress or psychiatric disorders.

261 - NEGATIVE EMOTIONS ARE CORRELATED WITH LEPTIN LEVELS AND AUTONOMIC AROUSAL IN OBESE WOMEN AND MEN Messerli N, Hofer M, Laederach-Hofmann K. Clinic for Eating Disorders and Psychosomatics, Psychiatric Outpatient Department, Berne, Switzerland.

Aim: Emotional state especially negative emotions such as anger, anxiety and depression are known to influence eating behavior. Correlations between psychophysiological activation and negative affectivity as well as leptin levels are not known up to date. Thus, the aims of the current study were (1) to examine whether negative emotions are associated with body weight in subjects with obesity, and (2) to analyze the relationship between negative emotions and plasma leptin levels, and (3) to evaluate if autonomic activity is correlated to plasma leptin levels. **Methods:** We investigated 27 patients participating in a comprehensive out-patient program to change eating behavior, and loose weight by physical training. Mean age was 44 ± 12 years old, 6 men and 21 women were included, body mass index was 39.6 ± 4.8 kg/m². All patients filled out a set of questionnaires, including Spielberger Trait and Anger Expression Inventory (STAXI), Hospital Anxiety and Depression Scale (HADS). Blood samples were drawn to measure leptin levels at study begin. Data was analyzed by using a correlative statistics design. **Results:** In the whole group we found negative associations between anger-in and RR-interval during rest ($r=-0.44$, $p=0.017$) and during mental stress ($r=-0.43$, $p=0.022$). Anger-in correlated with anxiety ($r=0.46$, $p=0.014$). Sympathetic activation showed significant correlations with anxiety ($r=0.89$, $p=0.013$), depression ($r=0.96$, $p=0.001$), anger-out ($r=0.84$, $p=0.03$) in men during rest, and anger-in during mental stress ($r=0.82$, $p=0.042$). In women we identified a positive association between leptin and anger-control ($r=0.56$, $p=0.014$) and a negative one to anger-out ($r=-0.53$, $p=0.021$). Depression was significantly associated with anger-in in women ($r=0.59$, $p=0.003$) and with anger-out in men ($r=0.92$, $p=0.004$). There was a significant correlation between body weight and trait anger ($r=0.88$, $p=0.014$) in men. **Conclusion:** Obese people are engaged in over-eating as safe mechanism for self-regulation. Depression and anxiety are significantly correlated with anger which seems to be an element strongly associated with obesity. The higher the anger scores, the higher the body weight, the leptin concentrations and the level of sympathetic activation during rest and mental stress.

72 - PREVALENCE OF DEPERSONALIZATION AND DEREALIZATION IN PSYCHOSOMATIC

INPATIENTS Michal M, Overbeck G, Grabhorn R, Röder C. Clinic for Psychosomatic Medicine and Psychotherapy of the JW Goethe University/Frankfurt am Main, Germany

Depersonalisation (DP) and Derealisation (DR) have been reported to be the third most common psychopathologic syndrome after depression and anxiety. None the less DP/DR are mostly not captured by routine diagnostic investigation. Reasons for that are, that patients often do not complain spontaneously about these strange feelings.

They might fear that the clinician will think they are crazy and are therefore reluctant to report their experiences. For many of them it is also difficult to put these strange feelings into words. This lack of attention towards DP/DR can have an unfavourable impact on the research and treatment of mental and behavioural disorders. E.g. in patients with panic disorder the co-occurrence of DP/DR is a marker of severity and a poor prognostic sign and relaxation techniques, widely used in psychosomatic inpatient treatment, are not well tolerated by patients with DP/DR. 102 psychosomatic inpatients (29 male : 73 female, age 34 ± 13 y) were consecutively interviewed within 14 days after admission with the chapters DP and DR of the German version of the Structured Clinical Interview for DSM-IV Dissociative Disorders (SCID-D). The prevalence of DP/DR was rated as none, mild, moderate or severe during the last month according to the SCID-D. Moderate or severe DP/DR is considered as pathological DP/DR, whereas none or mild DP/DR as not pathological. Additionally the German version of the Cambridge Depersonalisation Scale (CDS), the Dissociative Experiences Scale and the SCL-90-R were administered. 30.1 % of subjects experienced pathological DP/DR. It mostly occurred in Depressive and Anxiety disorders. 33% of the subjects experienced no, 36% experienced mild, 17.6% experienced moderate and 12.7% experienced severe DP/DR. The Subjects with severe DP/DR had an CDS Score of 121.2 ± 57.8 , an DES-Score of 33.4 ± 19.1 and the onset of DP/DR was at the age of 10 ± 5 . The subjects with moderate DP/DR had an CDS Score of 77.6 ± 28.7 , DES-Score of 21.2 ± 9.2 and their age of onset was 18 ± 8 . The severity of DP/DR correlated with an earlier age ($\rho = -0.56$, $p < 0.001$) and with the GSI of the SCL-90-R ($\rho = 0.54$, $p < 0.001$). Pathological DP/DR has a high and often underestimated prevalence among psychosomatic inpatients. Self-ratings confirm the results compiled by the SCID-D.

264 - CAN GUIDELINES IMPROVE THE DIAGNOSIS AND MANAGEMENT OF MAJOR DEPRESSION IN THE GENERAL HOSPITAL? Michaud L. Institute of Social and Preventive Medicine, University of Lausanne, Switzerland

Introduction: After the development of Guidelines for the management of Major Depression (MD) in patients with somatic diseases (1), an implementation study was conducted to evaluate their impact on detection and management of MD. **Methods:** Diffusion of the Guidelines on the Intranet of the hospital was followed by two interactive sessions with clinical residents. One was dedicated to presentation and discussion, the second to training with an actor in order to learn how to use the short form of the guidelines. The intervention was conducted by the consultation-liaison psychiatry and designed to be simple and feasible as well as reproducible in the "real world condition". **Outcome:** Discharge letters of a historical sample of 337 patients prior and of 325 patients after the intervention were quantitatively and qualitatively analysed, searching for diagnoses, treatment or discussion of MD. **Results:** MD is under-diagnosed, under-reported and under-treated in the general hospital. No statistical differences were found concerning the number of diagnosed MD before and after the intervention. Further analyses will determine if an improvement occurred for other outcomes. **Conclusion :** A minimal intervention to diffuse and implement Guidelines on MD was not successful in improving the detection of depressive disorders. Other liaison strategies have to be considered to allow effective implementation of Guidelines for the management of MD in the general hospital. Further results and implications will be discussed. **Ref.:** Voellinger R, Berney A et al. Major depressive disorder in the general hospital: adaptation of clinical practice guidelines. *Gen Hosp Psychiatry* 2003; 25(3):185-193.

280 - THE IMPACT OF PSYCHOANALYTICALLY ORIENTED PSYCHOTHERAPY FOR THE TREATMENT OF PSYCHOSOMATIC PATIENTS. IN MEMORY OF CHRISTEL SCHÖTTLER – A PIONEER IN PSYCHOANALYTIC PSYCHOSOMATIC Milch W, Giessen, Germany, Spring L. Zuerich, Switzerland

Psychosomatic medicine can be understood as the science of the intertwining of biology, psychology and socialization in terms of the origin, course of development and treatment of human illnesses. The theory of illness is believed to have social, psychological, physiological and inorganic causes that interact with the environment and that postulate psycho-somatic as well as somatic-psyche reciprocal

processes in understanding illnesses within psychosomatic medicine (Uexküll 1996). Psychotherapy is a major method to treat psychosomatic diseases. Psychoanalysis as a theory of treatment had had a decisive influence on the development of treatment strategies, though the psychoanalytical setting had to be altered to treat psychosomatic patients (Schöttler 1981, 1998). In the last decades new behavioural oriented treatments competed with psychoanalytic oriented therapies which was a major challenge to develop new ways of treatment. In this workshop, traditional and newer psychoanalytic concepts about the treatment of psychosomatic patients will be discussed.

126 - THE ROLE OF SELF-EFFICACY, SOCIAL SUPPORT, AND COPING FOR FINDING MEANING IN CANCER

Mohamed NE. Free University of Berlin, Germany

Finding meaning in traumatic life events is an emerging topic in stress and coping research. The present study investigates personal and social resources of cancer patients and their perceptions of different types of benefits and gains in response to having had cancer. Moreover, the mediating role of coping strategies (active coping, accommodation, and avoidant coping) was examined. One month after tumor surgery, 115 cancer patients completed measures of social support and self-efficacy. Coping was assessed half a year after surgery while benefit finding was examined eleven months post-surgery. Correlational and path analyses revealed relations between self-efficacy, received social support, and three domains of benefits found in living with cancer, namely, personal growth, increased sensitivity to other people, and more closeness to family. Personal growth was associated with self-efficacy whereas report of more closeness to family and an increased sensitivity to other people were associated with receiving social support. Direct effects of self-efficacy on personal growth became non significant when active coping was specified as a mediator between self-efficacy and personal growth. Active coping partially mediated the relationship between social support and both closeness to family and an increased sensitivity to other people. Associations between avoidant coping, resources, and domains of benefits were not significant. Significant gender differences in received social support, closeness to family, and an increased sensitivity were found: Men received more support and reported more positive changes in family relationships, and more sensitivity to other people than women. The present study attested to the mediating role of active strategies in the recovery and adjustment after surgery.

169 - DOMESTIC VIOLENCE: A NEW, INTER-DISCIPLINARY APPROACH TO SUPPORT WOMEN

AND CHILDREN Moore-Schmeil C, Harms-Wahlich I, Koppelin F, Lungershausen M, Mührel M. Fachhochschule Oldenburg, FB Sozialwesen, Emden, Germany

Goal of the project: The goal of the project KUKT is to offer appropriate help and support to women and children suffering from domestic violence by establishing a regional and interdisciplinary intervention structure and by bringing therapy and social work closer together. Workshops and seminars on violence are offered regularly, thus raising a public awareness of this topic. Furthermore, psychodynamic dance movement therapy provides an effective alternative treatment model for the work with traumatized clients. Material and methods: The research project is funded for two years by the "Arbeitsgruppe für Innovative Projekte" of the Ministry of Science and Culture in Lower Saxony, Germany. Both qualitative and quantitative methods are used for measuring the efficiency and degree of implementation of the interdisciplinary support network and the efficiency of dance movement therapy. Results: So far, data have shown that interdisciplinary networking as well as a public demystification of trauma issues are beneficial to the psychological and social well-being of women and children suffering from domestic violence. In particular, the close fusion of social work and therapy have proven to be efficient for treating the psychological, psychosomatic and social effects of domestic violence within a relatively short period (12 sessions). Our presentation will focus on this aspect of the work. Discussion/Outlook: Interdisciplinary networking, public psychoeducation, social work and therapy are key aspects to the work with women and children suffering from domestic violence. Although a political awareness has grown for the

psychological, somatic and social effects of domestic violence, much more has to be done for the long-term treatment of these effects. Here, intertwining social work and therapy may have efficient approaches to offer.

75 - ARE LIFE GOAL PATTERNS ASSOCIATED WITH MENTAL AND PHYSICAL HEALTH?

Mueck-Weymann M, Petrowski K, Joraschky P, Gottschalk T, Poehlmann K. Dept. of Psychosomatic Medicine, TU Dresden, Germany

Background. Basic research provides ample evidence for the fact that goals are an important factor for subjective well-being as well as for physical health. In particular, psychological and physical well-being depends on (i) feeling committed to personally relevant goals, (ii) the type of goals pursued, and (iii) the degree of progress in attaining them. Aim. A cross-sectional screening study was conducted to examine how different life goal constellations are related to mental health (life satisfaction, anxiety, depression, health belief) and physical health, i.e. heart rate variability. Method. Data was collected in a sample of 268 adults (143 men, 125 women; age $M = 43$, $SD = 17.0$). Clusteranalyses were conducted based on the importance and progress ratings of agency life goals (achievement, power, variation) and communion life goals (intimacy, affiliation, altruism). Results. Three groups were identified which differed in life goal constellations as well as in psychological and physical health. Group 1 pursued only moderately important life goals and made little progress in their attainment. These individuals reported high levels of anxiety and depression and their heart rate variability was reduced. Group 2 was making medium progress in pursuing important life goals. Compared to group 1, these individuals were more healthy in all dimensions of mental and physical health. Individuals of group 3 rated the agency goals of power and variation as very important and were very successful in achieving all six life goals. They scored especially high on life satisfaction and low on depression. Conclusion. Agency motivated individuals seem to be mentally and physically healthier than persons pursuing other goals. They are more eager to deal with new and exciting experiences and have a stronger desire to exert influence on what happens to them. Physiological data also indicates that they might be more able to deal with stress.

78 - HEART RATE VARIABILITY BIOFEEDBACK

Mueck-Weymann M, Poehlmann K, Joraschky P. Dept. of Psychosomatic Medicine, TU Dresden.

Biofeedback is an established behavioural technique that can be used to treat various psychiatric, somatic and psychosomatic diseases. Treatment effects can be characterized by measures of physiological functions such as skin conductance, peripheral blood flow and skin temperature. Heart rate shows a complex pattern of beat-to-beat variability in healthy subjects which is named heart rate variability (HRV). HRV is based on autonomic reflexes and humoral processes due to homeostatic regulation. A novel biofeedback technique employing assessment of HRV has been promoted as a tool for treatment of asthma, hypertension and anxiety disorder. HRV is characterized by multifrequent oscillations under relaxed and resting conditions. An autonomic rhythm related to respiration prevails in short term frequency spectra of HRV between 0.15 and 0.4 Hz whereas spontaneous baroreflex activities control frequencies around 0.1 Hz. Instructing patients to breathe deeply and slowly at a frequency of approximately 0.1 Hz results in harmonisation of these two physiological rhythms. Subsequently, respiratory sinus arrhythmia (RSA) is increased resulting in a pattern of HRV close to monofrequency at 0.1 Hz. Maximization of RSA by controlled breathing trains baroreflexes and makes them more efficient. Thus, influencing autonomic neurocardiac rhythm by means of controlled breathing enhances regulatory competence of the autonomic nervous system which is a major rationale of HRV-biofeedback. During the last two decades the bimillenary ken of HRV was packed into computer aided systems for medical diagnostics and promoted as a wide spread biofeedback tool for improvement of vitality and wellbeing. The present lecture deals with the psychophysiological background, clinical applications as well as with limitations and some major pitfalls of HRV-biofeedback.

79 - CLINICAL PERTINENCE OF DRUG INDUCED AUTONOMIC DYSFUNCTION Mueck-Weymann M, Pöhlmann K, Siepmann M, Agelink M, Joraschky P. Dept. of Psychosomatic Medicine, TU Dresden.

Background: Most antidepressant drugs lead to enhanced synaptic availability of the neurotransmitters serotonin and/or norepinephrine. However, affecting also other transmitters, e.g. acetylcholine, antidepressants cause peripheral autonomic dysfunction (e.g. dry mouth, tachycardia). Aim of our study was to objectify these autonomic dysfunction with respect to its consequences for biofeedback applications in psychosomatic and psychiatric patients. Methods: Therefore, we applied simultaneous recordings of ECG for assessment of heart rate variability (HRV), as well as skin blood flow and skin conductance level – indicating peripheral autonomic responses like inspiratory gasp response (IGR) and skin conductance response (SCR) – to patients under treatment with psychotropic drugs (amitriptyline-, olanzapine-, clozapine-, fluoxetine-, or hypericum extract; n=20 each). Results: We found that heart rate variability was reduced in all patients treated with amitriptyline, olanzapine, or clozapine but not under treatment with fluoxetine, or hypericum. Exclusively in amitriptyline-, olanzapine-, clozapine-treated patients 1) redilation of IGR was prolonged, indicating inhibition of norepinephrine re-uptake, and 2) in about 50% of these patients SCR was blocked completely, or reduced in the other 50% (due to anticholinergic effects). Conclusions: We suggest that these autonomic dysfunction are due to various interactions of these drugs with neuronal structures and pathways (e.g. alpha 1-, alpha 2-, M 2-, M 3-receptors, inhibition of norepinephrine re-uptake). Applying biofeedback on psychiatric or psychosomatic patients, one should keep in mind that some psychotropic drugs interact with autonomic functions.

248 - COMMUNICATION SKILLS TRAINING FOR MEDICAL STUDENTS Muehlinghaus I, Burger W, Schwantes, U. Reformstudiengang Medizin, Universitätsmedizin Berlin, Germany

Since 1999 a problem based curriculum is implemented as parallel track at the Charité - Universitätsmedizin Berlin. It is the first program in Germany with a continuous communication skills (CS) training for ten semester called Interaktion. Communication skills are taught in groups of seven students and one instructor every other week for three hours. In Interaktion students learn the application of social skills and they acquire basic knowledge about conversation-styles, history-taking skills, counselling and breaking bad news; the course serves also as a forum for reflecting the doctor-patient-relationship. Standardized patients (SPs) are employed as an important tool to teach communication skills and interpersonal skills. Whenever possible, within the group every student conducts one conversation per semester with one SP. Immediately after the session the students receive feedback about their performance from the SP, the peers and the instructor. SPs are trained intensively to give constructive feedback using a structured feedback guide. The aim of this poster is to give an overview about the current communication curriculum and the process of program development. The evaluation results support the significance of the program Interaktion. Future perspectives of the program development such as the assessment of communication skills will be outlined.

134 - COMPULSIVE BUYING: DESCRIPTIVE CHARACTERISTICS AND PSYCHIATRIC COMORBIDITY OF 22 CASES Müller A, Silbermann A, Kadege-Schindler M, Student S, de Zwaan M. Department of Psychosomatics and Psychotherapy, Friedrich-Alexander-University Hospital, Erlangen.

Compared to other problematic behaviors, compulsive buying has received limited research and clinical attention. The phenomenon is best defined as a maladaptive, frequent preoccupation with buying or impulses to buy and/or as a frequent buying of more than can be afforded of items that are not needed. This behavior causes marked distress, interferes with social or occupational functioning, or results in financial problems. The primary goal of this study was to describe subjects who met the criteria defined by McElroy (1994) for compulsive buying and/or who scored more than two standard deviations above the mean on the Hohenheimer Kaufsuchtindikator (Scherhorn, 1990), and the Compulsive Buying Scale (Faber, 1992).

Method: Twenty-two women were recruited for participation in a cognitive-behavioral psychotherapy study and were assessed with the Structured Clinical Interview for DSM-IV, the SCL-90-R, the Yale-Brown Obsessive Compulsive Scale-Shopping Version (Y-BOCS-SV), the Maudsley Obsessional-Compulsive Inventory (MOC), the Barratt Impulsiveness Scale (BIS-11), and the Neo-FFI. Results: Compulsive Buyers had a mean age of 46 years (Range 25-61). Fourteen (64%) of the subjects met lifetime diagnostic criteria of social phobia, ten (45%) for major depression, nine (41%) for obsessive-compulsive disorder, seven (32%) for PTSD, seven (32%) for general anxiety disorder, six (27%) for specific phobia, six (27%) for panic disorder with agoraphobia, five (23%) for substance use/dependence, four (18%) for binge eating disorder, and three (14%) for bulimia nervosa. The mean Global Severity Index, GSI of the SCL-90-R was 1.5 (SD 0.7). The mean Y-BOCS-SV score was 21.7 (SD 6.8), the mean summary score of the MOC was 10.9 (SD 6.3), and of the BIS-11 84.2 (SD 14.1). The values in SCL-90-R, Y-BOCS-SV, BIS-11, and MOC are markedly above the mean. Conclusion: Compulsive buying may cause significant psychopathological distress and is associated with significant psychiatric comorbidity. The phenomenon displays features of compulsive disorder and high impulsiveness.

166 - EVALUATION OF A QUESTIONNAIRE TO ASSESS THE QUALITY OF PHYSICIAN-PATIENT INTERACTION Müller KG, Bieber C, Blumenstiel K, Richter A, Eisenbeiß D, Wilke S, Eich W. University of Heidelberg, Department of Internal Medicine II, Heidelberg, Germany.

Background: Physician-Patient- Relationship plays an important role regarding the outcome of the treatment of patients especially in the field of psychosomatic medicine. One approach to affect physician-patient interaction is to improve physician's communication skills by means of a communication training. Up to now there are few instruments on physician-patient communication with sufficient properties to evaluate such trainings. Methods: We developed and validated a 14-item questionnaire to assess the quality of the physician-patient-interaction during the consultation. In a randomised controlled trial we evaluated a communication training for physicians treating patients with fibromyalgia (FMS) using this questionnaire. 127 participants in 5 outpatient clinics of the department of internal medicine of an University hospital were included in the validation sample. 85 FMS-patients were included in the clinical testing sample. An ANOVA is calculated to detect differences between intervention and control group. Results: Psychometric properties of the instrument are satisfactory (Cronbach's alpha was .92; Retest-reliability reached .65). Compared to other instruments assessing patient's view on health care, there was only a moderate ceiling effect. Regarding the evaluation of the communication training, the quality of physician-patient-interaction was assessed significantly higher in the intervention group ($p < .001$). Discussion: The Heidelberg questionnaire to assess the quality of physician-patient interaction is an adequate instrument to evaluate interventions which address physician-patient relationship compared to a control group. Further research is to be done regarding the scale's sensitivity to changes over time.

106 - LOOKING FOR NEW STRESS MEASURES - ALPHA-AMYLASE IN SALIVA Nater UM. Institute of Psychology, Clinical Psychology & Psychotherapy, University of Zurich, CH.

Parameters for stress measurement such as cortisol and catecholamines have been established in psychobiological stress research in humans. However, a broadening of the methodological canon is desired. The enzyme alpha-amylase has been proposed to indicate stress-reactive bodily changes. Due to a prior study of our work group marked increases in salivary alpha-amylase (AA) following psychosocial stress indicate a stress-dependent activation of AA. We aimed to (1) reevaluate the reactivity of salivary and plasma AA following a standardized psychosocial stress setting, and to (2) assess a possible relationship between AA and other stress markers. In our study, 30 healthy young men underwent either first the Trier Social Stress Test (TSST), mental arithmetic task and free speech in front of an audience) or a control condition and vice versa. Salivary AA and cortisol (via cotton rolls placed in the mouth) as well as plasma AA and plasma catecholamines (via indwelling catheter in the antecubital vein) were repeatedly measured before, during and after both conditions (a total of 5 times). Significant differences between the stress and the rest

condition have been found: salivary AA ($p < .01$), plasma AA ($p < .05$), salivary cortisol ($p < .001$), and plasma catecholamines ($p < .001$). No correlations between AA and catecholamines and cortisol have been found. Since AA does not seem to be related to other biological stress markers such as catecholamines and cortisol, underlying physiological systems might differ from those responsible for the stress-dependent changes in AA levels. Thus, measuring alpha-amylase may be a new possibility to assess physiological changes that occur due to acute stress, possibly complementing the concurrent measurement of other endocrine and psychophysiological parameters. The role of alpha-amylase in diagnosis of stress-related disorders in psychosomatic medicine will be discussed.

107 - AUTONOMIC STRESS REAGIBILITY IN PATIENTS WITH BORDERLINE PERSONALITY DISORDER AND HEALTHY CONTROLS

Nater UM. Institute of Psychology, Clinical Psychology & Psychotherapy, University of Zurich, CH.

Borderline personality disorder (BPD) is a severe and frequent psychiatric disorder. It is characterized by a chronic pattern of dysfunctions in emotional regulation, interpersonal relationships, self-image, and impulse control. The cardinal symptom is a state of aversive tension. Patients with BPD are experiencing these symptoms several times a day which leads to a state of chronic stress. Several studies have investigated the physiological consequences of BPD symptoms on endocrine and autonomic systems. Dysregulations of the autonomic nervous system (ANS), however inconclusive, have been found. In this study, we set out to examine BPD patients in a standardized psychosocial stress paradigm, which is known to lead to substantial increases in parameters of the ANS. Heart rate variability (HRV) was measured. Cognitive appraisal processes and emotional responses also were examined. A sample of 21 female BPD patients and 21 healthy control subjects follows the study protocol. All subjects are medication free, have a regular menstrual cycle and are taking part in the study during their luteal phase. Comorbidity with psychiatric disorders like schizophrenia, affective psychoses, severe drug abuse, and severe eating disorders is excluded. We hypothesize that patients with a BPD diagnosis will show lower HRV in comparison to control subjects at baseline. Furthermore, sympathovagal balance is thought to be dysregulated as a consequence of the psychosocial stressor in BPD patients while normal in control subjects. Preliminary results will be presented at the conference.

232 - CEREBRAL BLOOD FLOW DURING VAGUS NERVE STIMULATION

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Background: Vagus nerve stimulation (VNS) in humans generally refers to stimulation of the left vagus nerve at the cervical level VNS is a treatment for medically refractory partial onset seizures and for major depressive disorders. In our study the vagus nerve stimulator was used as a method for investigating the vagal nerve influence on cerebral blood flow in vivo. Methods: 10 patients with major depression participated in an open label, non-randomized, single-arm, longitudinal, study of vagus nerve stimulation in depressive patients were included in this study. They had no vascular risk factor except for smoking and no other psychiatric or neurologic disease otherwise than major depression. Blood flow investigations were performed in a blinded manner by means of a transcranial Doppler instrument. To evaluate blood flow changes, mean flow velocity (MFV) of the left middle cerebral artery was continuously monitored at baseline and at 3 different stimulation intensities (0.25, 0.5 or 0.75 mA). Results: No significant influence of blood flow velocity by vagus nerve stimulation could be found. There was a trend for increase of blood flow velocity after switch on of the stimulator and stepwise increase of the current which did not, however, reach statistical significance. Conclusions: This study does not provide evidence for an influence of left vagus nerve stimulation on cerebral blood flow. At least two reasons may be conceivable for these results: first, stimulation of the left vagus nerve do not have acute parasympathic properties on the cerebral blood vessels. Second, cerebral vessel responses to vagus stimulation were quickly antagonized by cerebral autoregulation response.

220 - PREVENTION AND TREATMENT OF POSTSTROKE DEPRESSION WITH MIRTAZAPINE

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Background and purpose Poststroke depression is one of the most frequent complications of stroke affecting approximately 20-40% of all patients. In spite of the importance of this neuropsychiatric disorder, little attention has been given to the prevention of poststroke depression. The purpose of this study was to examine whether prophylactic treatment with the antidepressant mirtazapine in patients with acute stroke given from day one after the incidence prevents poststroke depression. Methods: Patients with ischemic stroke received either 30 mg mirtazapine or no antidepressant medication from day one after the stroke in an open, randomised study design. Seventy patients were enrolled in the study and were reexamined on day 7, 44, 90, 180 and 360 using neurological, functional and depression rating scales. Those post-stroke patients who developed depression, but had been randomized to the non-treatment group, were given the antidepressant mirtazapine after the diagnosis had been established. Results: Using DSM IV criteria, 40% of the non-treated patients and only 5.7% of the patients who were treated with mirtazapine developed poststroke depression. Altogether 16 patients developed poststroke depression, 15 of whom remitted after initiation of treatment with mirtazapine. Conclusion: Mirtazapine significantly reduced the rate of poststroke depression in patients with acute stroke. The study also demonstrated that this antidepressant was highly effective in poststroke depression.

179 - WORK STRESS AND PERFORMANCE AMONG US FOREIGN EXCHANGE TRADERS

Nimgade, Ashok. Harvard University, Brookline, USA

Background: The purpose of this study, the largest yet scholarly survey of US foreign exchange traders, was to (a) identify factors associated with higher perceived "overall stress" in a high stress occupation; (b) examine the relationship between occupational stress and performance. Methods: 326 traders (59% participation rate) completed a questionnaire assessing occupational stress; concomitantly, performance evaluations of individual traders by supervisors were also obtained. Results: At the individual level, traders regardless of job role perceived the most stress coming from Profit goal, followed in order by Long hours, Time pressure, Fear of making mistakes, and Pressure from superiors. This overall pattern was strikingly similar to earlier findings among European traders. No significant correlation was found between trade quantity/frequency and overall stress. Different trading roles were associated with differing profiles of perceived stress. At the organisational level, significant differences in perceived stress were also found between trading departments. Traders with higher performance ratings reported less stress for a large variety of factors. Traders who identified with the metaphor of the marketplace being like a "dangerous battlefield" reported greater "Overall work stress" (but had no difference in performance ratings). Discussion and conclusion: At the individual level, a strikingly similar profile across all traders indicates universal responses to job demands. The lack of association between quantity/frequency of trades and work stress may reflect the considerable latitude traders enjoy with regards to personal trading styles and philosophies. However, the possibility of different personality types being attracted to different trading roles may also explain this finding. Belonging to different job role categories, however, also affects stress perception. In addition, organizational-level differences may also indicate that the way work is organized affects perception of work stress. However, self-selection by traders with regards to job roles or employers might also account for these differences. Although traders with higher performance ratings report less stress, no conclusions can be drawn regarding causality.

49 - LACK OF PSYCHOLOGICAL MINDEDNESS IN MEN WITH CORONARY HEART DISEASE

I. Nyklicek & J. Denollet. Tilburg University; NL.

Psychological mindedness (PM) is the tendency to monitor and analyse one's inner thoughts and feelings. It was examined whether coronary patients have lowered scores on this trait, which may have relevance for intervention in these patients. Sixty patients with coronary

heart disease (80% men, mean age = 57 years) were compared with 127 healthy controls (college students; 30% men, mean age = 22 years) and 60 psychiatric patients (45% men, mean age = 48 years) regarding a number of psychological variables: PM (measured by the Lack of Psychological Mindedness Index, Denollet & Nyklicek, 2004), positive and negative affect (Global Mood Scale), depressive symptoms (Beck Depression Inventory) and defensiveness (Marlowe-Crowne Social Desirability Scale). Coronary patients showed lower PM than the control subjects ($p < .001$), while their scores were not different from those reported by the psychiatric patients. In addition, coronary patients scored significantly higher on negative affect and depressive symptoms and lower on positive affect than healthy controls ($p < .001$). No association was found between PM and measures of positive and negative affect, depressive symptoms, or defensiveness in coronary patients (all $r < .10$, $p > .10$). Psychological mindedness is relatively low in coronary patients and independent of other psychological constructs measured. This makes it a potentially valuable construct providing additional information in coronary patients and a factor that may be relevant for intervention outcomes in these patients.

140 - TRANSCULTURAL ASPECTS OF SOMATIZATION IN TURKEY: A STUDY OF 70 CASES Mine Özkan. Istanbul Medicine Faculty, Turkey.

Somatization in its various forms is extremely common and poorly recognized problem in all aspects of medical practice in Turkey thus leads to mistreatment and excess morbidity and chronicity. The setting of Consultation Liaison Psychiatry makes possible to early reach to these people and to study general characteristics. The presented study conducted at the CLP department of Istanbul Faculty of Medicine. This study is conducted with 70 patients diagnosed as somatization disorder (DSM-IV) from among those referred from the other various clinics of the hospital. All of these cases are referred from outpatient clinics and were followed from CLP outpatient clinic. This study aimed to understand the main features of somatization disorder, level of alexythymia and correlating factors with alexythymia. A semi structured interview form pertaining questions on sociodemographics, illness behavior and illness cognition was applied. The degree of alexythymia was measured with Toronto Alexythymia Scale. Somatization was meaningfully more prevalent in females, housewives and married. A high level of alexythymia among the cases was found. Somatization appears to be a mode of communication and an expression of emotional strain and psychological distress in symbolic body language. Psychiatry should penetrate developmental and societal processes in health and diseases

205 - THE ACADEMY OF PSYCHOSOMATIC MEDICINE AND PSYCHOTHERAPY IN BERLIN—MEDICAL TRAINING IN A COMPLEX FIELD

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„Psychosomatic medicine and psychotherapy“ is an independent and separate medical specialty in Germany, requiring five years of postgraduate fulltime training at an approved educational clinic or practice. In the paper there is a description of the special demands on education in this subject, characterized by the necessary double qualification in somatic medicine as well as psychotherapy. The model developed at the Academy of Psychosomatic Medicine and Psychotherapy in Berlin will be presented.

258 - DISTINCT P300 CORTICAL CURRENT DENSITY PATTERNS IN DMS PATIENTS AS COMPARED WITH SCHIZOPHRENIC PATIENTS. Papageorgiou C, Lykouras L, Kontoangelos K, Christodoulou GN. Department of Psychiatry, Eginition Hospital, University of Athens, Greece.

Background: There is a debate on whether delusional misidentification syndromes (DMSs) and schizophrenia are distinct disorders. The amplitude of the P300 component of the auditory event-related brain potential (ERP) is consistently reduced in schizophrenia. Recent research revealed also reduction of P300 in patients with DMS. Since scalp ERPs are sensitive to only a fraction of the neural activity elicited by a given event, the present study aimed to overcome this limitation applying the low-resolution brain electromagnetic

tomography (LORETA), which differentiates between structural and energetic processes related to information processing as revealed by the associated ERP waveform. Methods: A LORETA analysis was performed in the P300 of ERPs elicited during a WM test in nine patients with DMS, and eleven patients with schizophrenia matched for age, sex and educational level. The inter-group differences of P300 current density was assessed using a point by point comparison by t-test. Results: The analysis revealed that DMS patients as compared to schizophrenic patients exhibited a reduction of current density located at Brodmann area 11, Medial Frontal Gyrus, Brodmann area 7, Precuneus, Parietal Lobe and Brodmann area 42, Superior Temporal Gyrus. Conclusions: These findings support an integral role of the fronto-temporo-parietal network in the pathogenesis of DMS. The findings may also help to further advance the sub-grouping of functional psychoses on the basis of pathophysiological mechanisms.

259 - ASSOCIATION BETWEEN ANXIOUS TRAIT AND LIPIDEMIC AND NOVEL MARKERS OF CARDIO-VASCULAR DISEASE (CVD) AND LIFE STYLE BEHAVIOURS IN A POPULATION FREE OF CVD

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Background. Coronary heart disease (CHD) is now well recognized as a psychosomatic illness. Anxiety increasingly appears to have an impact on both the development of CHD over time and the precipitation of acute CHD events. The aim of this study is to investigate possible association between anxiety and lipidemic, coagulation and inflammation markers, related to CHD. Methods. The ATTICA study is a health and nutrition survey, which is being carried out in the province of Attica, Greece, during 2001-2002. Four hundred and ten participants (200 men, 39 ± 12 years old and 210 women, 35 ± 10 years old) completed the Spielberger-trait Anxiety Inventory. Blood samples were taken for the assessment of total and HDL cholesterol and triglycerides, high sensitivity C – reactive protein, fibrinogen, white blood cell counts and plasma homocysteine concentrations. Results. Women had higher levels of anxiety than men (42 ± 10 vs. 39 ± 7 , $p < 0.01$). High Anxiety scores were associated with physical inactivity ($F = 21.8$, $p < 0.05$), lower education status ($r = -0.23$, $p < 0.01$) and higher body mass index ($r = 0.1$, $p < 0.01$). Moreover, high anxiety scores were positively associated with positive C-reactive protein ($r = 0.21$, $p = 0.001$), high interleukin-6 ($r = 0.16$, $p = 0.004$), and high white blood cell counts ($r = 0.17$, $p = 0.01$). These associations were confirmed even after adjusting for age, sex, body mass index and physical activity status. Conclusion. The influence of anxiety on CHD risk factors, presented in this work, deserves further attention from public health policy makers and suggests preventive strategies aiming at reduction of mortality and morbidity rates in the general population.

187 - MIND-BODY COHERENCE: THE INTERMEDIARY 0.15 HZ RHYTHM BAND DURING AUTOGENIC TRAINING (AT) Volker Perltz, RWTH Aachen.

AT as a well established relaxation technique was monitored using nonlinear analysis, the Multi-scaled Time-Frequency-Distribution (mTFD) for the graphical display of vegetative rhythms, and Post-Event-Scan (PES) for the direct visual identification of coupling between physiological subsystems. Applying these methods to time series of respiration, arterial blood pressure, and cutaneous forehead blood content fluctuations in controls ($n=11$) or AT-experts (ATE, $n=11$) induced psychomotor drive reduction during orthostatic stress allowed the instantaneous identification of a 0.15 Hz-rhythm. This rhythm prevailed in ATE significantly longer resulting a significantly robust 1:1 coupling between cutaneous blood content fluctuations and respiration. Consequently, we hypothesize that the '0.15 Hz rhythm' in the cutaneous blood content fluctuations described previously which was associated with the subjective experience of profound psychomotor relaxation reflects an order-order transition in peripheral signals of central nervous origin. Results produced with the aid of these analytic tools support the efficacy of the AT induced, synergetic relaxation response.

249 - AFFECT STRUCTURES IN RESUMES OF

PSYCHOSOMATIC INPATIENTS Petrowski K. Clinic for psychotherapy, psychosomatic, and medical psychology, Dresden, Germany

Motivation: The analysis of primary data becomes more and more important for psychosomatic research and therapy. Especially for the description and quantification of mental structures, such data is a valuable source to complete clinical parameters independently of common questionnaires. In this study, we analyze the benefits of content-analytical methods for the initial psychosomatic screening and diagnostic routine. Method: The resumes of twenty depressed and twenty anxiety patients have been analyzed. The mean age among the patients is 31.7 years (range 18-56) and 72% of them are female. At the beginning of their clinical stay they had been asked to write a resume. These resumes were analysed using the Dresdner Anxiety Dictionary (DAW), a German version of the Gottschalk-Gleser-Anxiety Scale and other content-analytical software. As a reference the patients filled out two questionnaires (SCL-90, Koepts). Results: The resumes show apparent emotional involvement which is, however, of different strength in the two patient groups. Anxiety patients show a higher level of anxious emotions (total anxiety mean 1.21), especially of mutilation anxiety (mean 0.64). But in general, depressed patients express more emotions than anxiety patients. As expected, correlations between questionnaires and content analysis were found to be only on a lower level (SCL-90 anxiety scale x total anxiety 0.36, $p < 0.001$) since Questionnaires measure conscious aspects whereas content analysis assesses unconsciousness aspects. Conclusions: Our results confirm the differences between depressions and anxiety patients as they are known from the literature. Patient's resumes include not only hard biographic facts, but also inside information about affect structures. This allows identifying especially emotional connected life phases, which than can be quantified and be addressed during therapy. In summary, content-analytical method has been found to be helpful for the psychosomatic evaluation process.

40 - HOW SELF-REGULATION CAPACITIES CHANGE IN THE CAUSE OF IN-PATIENT

PSYCHOTHERAPY Pöhlmann K. University Hospital of Psychotherapy and Psychosomatic, Dresden, Germany

The improvement of self-regulation capacities is considered to be a general aim of psychotherapy. The Goal Systems Assessment Battery measures self-regulation functions referring to the therapy goals the patients are pursuing. The directive function represents the intensity of goal striving and contains the subscales of value and self-efficacy. The regulation function evaluates the fit between desired outcome and current status of goal pursuit based on social comparison or self-monitoring. The control function governs the planning of goal-directed activities and problem-solving during goal pursuit. It includes planning/stimulus control, self-criticism, and self-reward. The arousal function differentiates between positive and negative emotions providing the energy for goal pursuit. Method. The clinical sample consists of 115 patients of the University Hospital for Psychotherapy and Psychosomatic Medicine in Dresden with various psychosomatic disorders. They were undergoing in-patient treatment combining psychodynamic individual therapy with cognitive therapy group sessions and various other treatment elements like art therapy, body therapy, etc. The mean duration of stay was 53 days ($SD = 9.8$). The GSAB was applied at the beginning and at the end of the treatment. The clinical data was compared to GSAB data from 600 mentally healthy adults. Results. The patients displayed deficits in self-regulation and strategic capacities relevant to the implementation of goals although they were very committed to their goals at the beginning of the treatment. Their self-efficacy conviction was low and their therapy goals caused intense negative as well as positive emotions illustrating extreme ambivalence to pursue a goal the patients rate as extremely important but are not confident at all to achieve. At the end of the treatment crucial self-regulation dimensions such as self-efficacy, self-reward and negative arousal had improved significantly (all $ps < .01$). Discussion. The results demonstrate that the GSAB is a useful instrument to measure crucial change processes in psychotherapy, i.e. the improvement of self-regulation capacities. It can provide useful information for goal development and intervention planning.

74 - FAMILY HISTORY SIGNIFICANTLY PREDICTS HYPERTENSION DEVELOPMENT BUT LIFE EVENT

STRESS DOES NOT Rahn M, Leclerc J, Linden W. University of British Columbia, Vancouver, Canada

Data from a ten-year prospective study (REACT) on development of hypertension were analyzed to test an interaction between blood pressure change, family history and life event stress (assessed with the Life Experiences Survey (LES). The diathesis-stress hypothesis tested here suggested that a positive family history when co-occurring with high life stress would contribute to hypertension development. After 10 years, one-hundred and twelve REACT participants returned to complete 24-hour ambulatory blood pressure monitoring (ABPM) and several personality measures including the LES within the past year. At the time of recruitment, participants reflected a 50% split on positive/negative family history (FH) and all participants were normotensive (ABPM day-time means $< 140/90$ mmHg). Ten years later 19/112 participants had developed systolic hypertension (ABPM daytime mean > 139 mmHg) and 13/112 developed diastolic hypertension (mean > 89 mmHg). Data were analyzed in a dichotomous fashion (FH+/-, hypertension yes/no, LES positive/negative stress, and high/low life stress using a median split) to allow computation of odds-ratios. Systolic and diastolic hypertension were each significantly predicted by FH+ (Odds-ratio (OR) = 2.8 and 4.6, $p < .002$ and $< .001$) but not by LES negative scores (OR = .89 and .85) or LES positive (OR = .78 and .70). Using Fisher's Exact Test, no interaction between family history and LES was found. As shown elsewhere, personality factors and a positive family history are stronger predictors of hypertension development than is life stress, and it does not matter whether life event stress.

85 - PAIN PERCEPTION, HYPNOSIS AND

DEPERSONALIZATION - A STUDY WITH FMRI Röder CH¹, Morawetz C^{1,2}, van de Ven V³, Overbeck G¹, Linden DEJ^{4,5}. 1

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Hypnosis and depersonalization share common features, such as withdrawal from environment and reduced pain perception. Imaging studies with PET used hypnosis to dissociate intensity and "pleasantness" of pain, but not the anaesthetic effects of hypnotic depersonalisation as such. We examined the effect of hypnotic induced relaxation and depersonalisation in highly susceptible healthy controls (HC) for hypnotic suggestions. We hypothesised that activity of primary somatosensory cortex (S I) would reflect these hypnotic suggestions. A group of HC was screened for hypnotic susceptibility (HS) with the Harvard Scale of Hypnotic Susceptibility. 5 subjects with a HS > 9 (on a scale from 1 to 12) underwent an fMRI-measurement. We measured 3 conditions, normal wakefulness, hypnotic relaxation and the hypnotic depersonalisation (the suggestion to be out of the body). In each condition we stimulated the median nerve of the right hand in an event-related 2-step - parametric design (motor and pain threshold). Stimuli were delivered with a standard stimulator for somatosensory-evoked potentials. Individual thresholds were determined prior to scanning. We detected an activation pattern in awake subjects similar to previously reported. Contralateral (S I), SMA, bilateral secondary somatosensory cortex (S II) and insula were activated by stimulation at pain threshold, but at motor threshold only S I, ipsilateral S II and contralateral insula. While hypnotic relaxation resulted in a decrease of activation in SMA, contralateral S II and ipsilateral insula, hypnotic depersonalisation resulted in a marked decrease of total brain activation, including S I, corresponding to the individual amount of depth of hypnotic state. Our data suggest that depersonalisation not only changes subjective experiences of environmental stimuli on a higher order level of mental processes (e.g., reasoning), but also on low level primary sensory areas. More specifically, anaesthesia for self inflicted injury in depersonalisation states may be reflected by a decrease of activation in somatosensory areas. The underlying mechanisms remain unclear but we suggest that brain systems, involved in the production of depersonalisation like prefrontal cortex, lead to an inhibition of primary somatosensory areas.

151 - EVALUATION AND DEVELOPMENT OF A COMPUTER ADAPTIVE TEST FOR ANXIETY (A-CAT)

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Purpose: Psychological measurements based on the Classical Test Theory have several methodological shortcomings. Theoretically some of these can be prevailed using the Item Response Theory (IRT) for test construction. Beside that computer adaptive applications of IRT based tests promise a significant improvements in respect to measurement precision and item reduction. To test these assumptions we developed a 'Computer Adaptive Test for Anxiety' (A-CAT). Subjects: We used the data from three independent samples (N1=2348, N2=1528, N3=102), which were admitted between 1/1995-10/2003 to the Department of Psychosomatic Medicine. Methods: Sample 1 answered a set of up to 13 established questionnaires (STAI, HADS, SF36) covering various aspects of anxiety. Out of these questionnaires 81 items could be extracted related to the 'anxiety' construct, as rated by 4 independent reviewers. These items underwent different analysis to check for the assumptions required for IRT based test (eg. Unidimensionality, Differential Item Function, Model Fit) using the programs Mplus, Testgraf, SAS and Parscale. Finally for 50 items a Generalized Partial Credit Modell could be applied. The A-CAT scores are calculated using a EAP algorithm and a predetermined standard error of $\leq .32$ (reliability $\geq .90$). The evaluation of the instrument was made on sample 2. We demonstrated that the latent trait can be computed with approx. 5-7 items. The A-CAT scores correlate high with scores of all available items ($r=.97$) and with STAI or HADS scores ($r>.70$), showing a better discrimination of the CAT instrument at the low and high ends of the latent trait. We used the third sample to investigate the discriminative validity. These patients were diagnosed using a standardized diagnostic interview (CID-I). The A-CAT showed the same discriminative properties like the STAI. Conclusion: The Computer Adaptive Application of IRT based psychometric instruments leads to a presentation of more adequate questions for each patient ('tailored test'). Accordingly the absolute number of items could be substantially reduced without lost of major information and improved measurement precision in high and low score ranges.

153 - DETERMINANTS OF THE QUALITY OF LIFE OF PATIENTS WITH CONGENITAL HEART DISEASE

Rose M, Köhler K, Köhler F, Sawitzky B, Fliege H, Georgiewa P, Klapp BF. Dpt. of Psychosomatic Medicine, Charité University Medicine, Campus Mitte, Berlin, Germany

Objective: The improvement of the quality of life of chronically-ill patients has become an important goal in treatment. We examined the relative significance of biological factors, compared to psychological and social factors, for the various quality of life dimensions in patients with congenital heart disease. Research Design and Methods: 111 patients (aged 33 „b 12 years) with different degrees of cardiac dysfunction were examined (NYHA 0-IV). All patients for whom there was no contra-indication underwent a treadmill ergometry in order to determine their level of cardiopulmonary functioning (peak oxygen consumption: VO2max). All patients were asked to fill out questionnaires concerning their quality of life (WHOQOL-Bref), their cardiac complaints (Giessener Complaint Questionnaire GBB), their personality traits (Giessen Test GTS), and the social support they experience (Social Support Questionnaire SOZU-k22). The data were analyzed using a linear structural equation model (SEM). Results: In all aspects but the social domain, the HRQL of CgHD patients was significantly diminished compared to the normal population. The SEM proposed was valid, showing good indices of fit ($\chi^2=1.18$ $p=.55$, AGFI=.92). The level of cardiopulmonary functioning was most significant for the reporting of specific cardiac complaints ($b=.28$) and for the physical component of the general HRQL ($b=.32$), although the former was also influenced by a depressed disposition ($b=-.20$) and the extent of social support experienced ($b=.18$). The objective findings, however, had virtually no individual significance for the psychological ($b=.09$) and social domains ($b=-.02$). These HRQL domains are primarily influenced by depressive personality traits ($f\hat{O}=-.26/-1.16$) and the social support experienced ($b=.51/.51$). Conclusions: The patient's organic dysfunction primarily determines illness-specific complaints but has little relevance for the psychological and social aspects of the HRQL. These aspects are predominantly determined by the patient's depressive disposition and by the experienced social support. A

successful therapy should therefore take biological as well as psychosocial determinants of the quality of life into account.

26 - PSYCHIATRIC AND PSYCHOSOCIAL OUTCOME OF CARDIAC SURGERY: A PROSPECTIVE 12-MONTH FOLLOW-UP STUDY

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Background: Little is known concerning the natural history of psychiatric morbidity, postoperative delirium, cognitive decline, and health status in cardiac surgery patients, and the impact of neurocognitive dysfunction on health status after cardiac surgery with cardiopulmonary bypass (CPB). Methods: In a prospective study, we followed up for 1 year 30 of the original 34 patients, who had undergone cardiac surgery with CPB. Patients were assessed preoperatively, before discharge, and at 1 year after surgery with the SCID for DSM-IV, and a series of neuropsychological tests (SKT, MADRS, PTSS-10, SF-36). Delirium Rating Scale was used daily over the course of ICU treatment. Results: During ICU treatment, mild delirium occurred in 7 patients, moderate delirium in 2 patients, and severe delirium in 2 patients. In 4 patients, delirium was diagnosed within the first day after cardiac surgery. Delirious states lasted between 1 and 7 days, however, 9 out of 11 delirious patients recovered quickly within 3 days or less. At discharge, we recorded 11 patients to have adjustment disorder with depressed features, 6 patients to have acute full in-hospital posttraumatic stress disorder, 6 patients to have major depression, and 13 patients to suffer clinically relevant cognitive deficits. At 12 months, the severity of depression and anxiety disorders improved and returned to the preoperative level, and 6 out of the 30 followed-up patients displayed cognitive deficits. The diagnostic status of delirium was not associated with cognitive decline over time. Our patients' health status SF-36 self-reports significantly improved compared with baseline quality of life data. However, 1-year overall cognitive function scores were associated with lower health status. Discussion: An advantage of our study was that we used detailed psychiatric interviews as a way of monitoring mental state changes. We therefore avoided the pitfalls inherent in sole reliance on subjective self-report rating scales. To sum up, cardiac surgery with CPB is associated with improvements in health status relative to the preoperative period, but the presence of cardiac surgery-related cognitive decline impairing health status is a complication for a subgroup of cardiac surgical patients in the long-term outcome.

313 - THE POSITION OF PRIVATE PRACTICE IN TRAINING

Rüth-Behr B. German Society for Psychosomatic Medicine and Psychotherapy, Hamburg, Germany.

The role of private practice in the training of physicians in psychosomatic medicine is central, because the majority of patients with psychosomatic illnesses are given treatment as out-patients. The function of this part of the in-service training programme is the teaching of the ability to practise psychotherapy in crises under out-patient conditions, and also to conduct long-term psychotherapy. A training programme can currently be carried out in the course of work in private practice over an 18-month period; alternatively, it can be organized as part-time supplement for those working in hospital for the duration of their entire training. Supervision by several teachers is the central component of training. The supervisors cooperate within a structure that includes the medical director of the private practice, a cooperating institute, and, if appropriate, the psychosomatic clinic. They have the aim of supporting the learning processes of the trainees.

24 - STRESSFUL LIFE EVENTS AND HYPERPROLACTINEMIA. A CONTROLLED STUDY

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Little is known about the relationship between recent life events and onset of hyperprolactinemia, despite the well-known effect of acute psychological stress on prolactin levels in healthy subjects. Recent life events in patients with hyperprolactinemia compared to healthy controls were therefore investigated. We studied 52 consecutive patients with hyperprolactinemia (45 F/7M; mean age 34.9 ± 10.1 years, range 18-60 years) and 52 healthy subjects matched for sociodemographic variables. Nineteen patients (18 F/1M) had no

pituitary tumor and were diagnosed as suffering from idiopathic hyperprolactinemia. Patients with additional pathology or with high prolactin due to medications were excluded. All patients were interviewed by Paykel Interview for Recent Life Events while on remission after surgery or pharmacological treatment. The time period considered was the year preceding the first signs of hyperprolactinemia, and the year before interview for controls. Patients with hyperprolactinemia reported significantly more life events than control subjects ($P < 0.001$). The same significant difference compared to controls applied to patients with ($n=16$) and without ($n=36$) depression. All categories of events (except events that were likely to be under the subject's control) were significantly more frequent. There were no significant differences between patients with prolactinoma ($n=33$) and those with idiopathic hyperprolactinemia ($n=19$). Within the complexity of phenomena implicated in the pathogenesis of hyperprolactinemia, these findings suggest a potential role of emotional stress in either prolactin secreting pituitary tumors or idiopathic hyperprolactinemia.

161 - MOTIVATIONAL FACTORS IN PSYCHOTHERAPY OF EATING DISORDERS

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We examined changes in general psychopathology during psychotherapy of patients with anorexia and bulimia nervosa. We were also interested in distinguishing motivational characteristics of completers and dropouts with anorexia and bulimia nervosa. Method: All subjects completed two self-descriptive measures: Motivational Inventory and Hopkins Symptoms Checklist (HSCL-72). Questionnaires were completed three times: during qualification visit, at the admission and two weeks before discharge. Results: It was observed that general psychopathology among patients with anorexia nervosa and bulimia nervosa decreased. Comparing to completers with bulimia nervosa completers with anorexia nervosa had higher level of activity factor before treatment. Dropouts with anorexia nervosa differed from completers in decreased level of threat factor and activity factor. Completers with bulimia contrasted markedly with statistically meaningful decrease of Body Mass Index. Conclusions: Motivation among patients with anorexia nervosa is greatly affected by subjective state of threat. The influence of motivation on anorexia dropouts was shown in all constituent motivational factors which were under average level. Decision concerning dropping out the psychotherapy among patients with bulimia nervosa is not determined by motivation measured with Wysokińska-Gąsior and Matuszewski Questionnaire.

88 - ILLNESS PERCEPTIONS IN FIBROMYALGIA: A

COMPARATIVE STUDY Santos V, Madeira F, Rei A, Alte da Veiga F, Quartilho M. Coimbra University Hospitals, Department of Psychiatry, Coimbra, Portugal

When an individual is faced with a situation such as the experience of an unusual somatic symptom, or the provision of a new diagnosis from a doctor, he will construct a personal representation which, in turn, will determine his behavior and other responses, including help-seeking. Based on the self-regulatory model of illness representations (Leventhal et al. 1984), this work consists of a comparative study, involving a group of patients with the diagnosis of fibromyalgia ($n=50$) and a control group constituted by a sample of patients suffering from other chronic rheumatologic conditions ($n=50$). Some psychometric instruments were administered, including the Illness Perception Questionnaire (Weinman et al. 1996). Besides comparing the illness perceptions in the two samples, the study intended to correlate the results obtained with this test with some other sociodemographic and psychopathological variables, in the sample of fibromyalgia patients. With this aim in mind, we have included items related to pain intensity, health care consumption, previous traumatic experiences and life events, psychiatric antecedents, total number of medically unexplained symptoms, and also measures of general psychopathology (Derogatis, 1993), coping strategies, negative affectivity (Watson et al. 1988) and somatosensory amplification (Barsky et al. 1990). Standard descriptive and testing procedures were used as statistical analysis tools. The results of our study confirm the relevance of illness perceptions in the persistence of the symptoms and avoidance behaviors characteristic of fibromyalgia. On the other hand, our clinical experience and the results from this study are compatible

with a grid of predisponent, precipitant and perpetuation factors which could provide a better understanding and clinical management of fibromyalgia symptoms, from a cognitive-behavioral perspective.

50 - ANXIETY AND DEPRESSION: COMPARISON OF TRACHEOTOMISED AND INTUBATED PATIENTS OF AN INTENSIVE CARE UNIT

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This study investigated whether anxiety or depression was different between intubated and tracheotomised patients of a surgical intensive care unit. This study is the first that compares the well-being of intubated vs. tracheotomised patients. Methods: 17 intubated patients (7 women und 10 men) und 9 tracheotomised patients (3 women und 6 men) of an surgical intensive care unit took part in the study which was approved by the local ethics-committee. Anxiety and depression were evaluated by the Hospital Anxiety and Depression Scale (HADS), vigilance by the Glasgow Coma Scale and severity by the Simplified Acute Physiology Score (SAPS II). Results: Age, body mass index, vigilance, SAPS II-Score, anxiety and depression were not different between intubated and tracheotomised patients. Mean HADS-A was 9.8 (SD = 4.7) for the intubated patients and 10 (SD = 3.6) for the tracheotomised patients. 47.1% of the intubated patients and 44.4% of the tracheotomised patients had an abnormal HADS-A with a cut-off of more than 10 points. Mean HADS-D was 10.9 (SD = 6.1) for the intubated patients and 8.7 (SD = 4.5) for the tracheotomised patients. 52.9% of the intubated patients and 44.4% of the tracheotomised patients had an abnormal HADS-D with a cut-off of more than 8 points. HADS-A and HADS-D were not significantly different between intubated and tracheotomised patients. Conclusions: Anxiety and depression as measured by the Hospital Anxiety and Depression Scale HADS were high in both intubated and tracheotomised patients but there were no difference between the two groups. This is interesting, because tracheotomised patients are predestined for a longer mechanical ventilation period than intubated patients. In spite of this, in this study tracheotomised patients did not have more anxiety and depression than intubated patients. Studies including more patients have to confirm these findings.

87 - THE SEPARATION-INDIVIDUATION PROCESS IN ADOLESCENTS SUFFERING FROM BRONCHIAL

ASTHMA Schier K, Laczynska A. Faculty of Psychology, Warsaw University, Warsaw, Poland

Objective: The primary goal of this study was to complete the existing gap in the description of the developmental process of adolescents suffering from bronchial asthma. We hypothesized that there is a specific scheme of the separation-individuation process in adolescents suffering from bronchial asthma and we wanted to define it. We refer to model of psychobiological disregulation and psychoanalytic theories of attachment. Method: Measures included an original technique which we called the Family Map. The Family Map is a drawing in which the participants use symbols and put them on the map in a way that best represents their picture of their interpersonal relations. To analyze the data we prepared indicators based on theory concerning the separation-individuation process and the process of emotional differentiation. Sixty adolescents aged 15-20 were recruited for participation in the study. The experimental group consisted of 30 adolescents suffering from bronchial asthma, and the control group consisted of 30 healthy adolescents. Statistical methods was used to define differences. Results: 1. Youth suffering from bronchial asthma place themselves closer to their parents than their healthy equals. This deference can be understood as an expression of difficulties receding from parents and leaving infantile engagement towards them. 2. Youth suffering from asthma significantly seldom than controls define their contacts with persons out of their family as most important to them, which means that they search for new objects of affection in a smaller degree than their healthy equals. 3. Adolescents with asthma can imagine significantly fewer changes that will occur in the following years which can signify inhibited progressive eagerness. 4. Persons from the experimental group used fewer colors to describe their emotions than controls which means they have more difficulties with affect differentiation. 5. Youth suffering from asthma significantly seldom describe their feelings towards others as negative, what might suggest that they have difficulties in recognizing these feelings or that they

deny them. Concluding the results of our studies we can state that the separation-individuation process in adolescents suffering from bronchial asthma is inhibited.

226 - A DISSONANCE THEORETIC VIEW OF PARENTAL COPING AFTER DONOR INSEMINATION

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The development of children conceived by artificial donor insemination has been under investigation in a lot of studies. Most of the studies found a normal cognitive and emotional development of these children. However, little is known with regard to adaptation processes in donor insemination parents, enabling them to cope with their negative feelings towards the genetically "strange" child. 20 couples having conceived by donor insemination were compared to 23 couples having conceived in a natural way. All 43 couples had one child aged 4 or 5 years. All parents had to assess their children with regard to the question, how similar they were to themselves or to their partner concerning bodily features and personality features. There were significant differences between both groups with regard to similarities in personality features. Artificial donor insemination parents assessed their child to be highly similar to the social father as far as personality features are concerned. Our findings suggest a possible adaptation process reducing cognitive dissonance in donor insemination parents by emphasizing the importance of the social father for the personality development of their child.

171 - ATTITUDES OF PATIENTS WITH CHRONIC SKIN DISEASES TOWARDS PSYCHOTHERAPEUTIC TREATMENT

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Objective: The goal of this study is the comparison of attitudes concerning searching psychotherapeutic treatment of different patient and students groups. For this purpose, a questionnaire assessing attitudes of patients and healthy individuals towards psychotherapists and psychotherapeutic treatment was developed. **Methods:** 541 inpatients with chronic skin diseases, 218 patients from an outpatient clinic for psychosomatic medicine, 106 psychology students, and 341 medical students completed the Questionnaire on Attitudes towards Psychotherapeutic Treatment QAPT. **Results:** An item analysis confirmed 20 of the original 24 items. The following 4 dimensions of the QAPT were determined: competence of the psychotherapist, judgement by others, general attitude, and acceptance. **Conclusion:** The analysis showed inpatients with chronic skin diseases and medical students holding more skeptical views than patients of an outpatient clinic for psychosomatic medicine and psychology students having more positive attitudes towards psychotherapists and psychotherapy. These results empirically suggest that intensive efforts are necessary to inform patients with chronic skin diseases if there is an indication for psychotherapy.

272 - SIMULTANEOUS INVESTIGATION OF CONFOUNDING VARIABLES PREDICTING RESULTS OF DEXAMETHASONE SUPPRESSION

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Despite of the longstanding use of the DST in research the impact of confounding variables is still undetermined, supposedly due to a lack of studies examining parallel the influence of specific impact factors. Moreover, the traditional outcome of the DST in clinical application with a dichotomous classification as „suppressors“ vs. „nonsuppressors“ ignores information concerning individual dysregulation of HPA-system as extend of suppression relative to pre-dexamethasone cortisol levels. Therefore we investigated simultaneous following aspects as possible predictor variables for individual extend of suppression in DST: gender, age, body mass index, waist-to-hip-ratio, age of onset, number of former depressive episodes, severity of current episode, existence of psychotic symptoms and family history of affective disorders. To identify predictor variables multiple regression analysis is a well-established statistical method. In a first analysis of N= 100 patients we identified only age ($\beta = 0.22$; $r^2 =$

0.04) as well as pre-dexamethasone cortisol levels ($\beta = 0.37$; $r^2 = 0.11$) as significant predictors. Based on correlation analysis we observed significant negative correlations between individual extend of cortisol suppression and age ($r = -0.24$, $p < 0.01$) and age of onset ($r = -0.19$, $p < 0.05$) as well as only a tendency towards higher cortisol suppression the higher HAMD rating scores are ($r = -0.16$, $p < 0.06$) and the higher waist-to-hip-ratio is ($r = -0.17$, $p < 0.06$). Since data collection is still going on, recent results will be presented at the congress.

125 - IMPACT OF POSITIVE AND NEGATIVE INCIDENTS ON STRESS SYSTEM ACTIVITY IN PATIENTS WITH SLE

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Background: To date, little evidence has been available on the complex functional properties of HPA axis and cellular immune system under real-life conditions. This project investigated patients with systemic lupus erythematosus (SLE) and thought to determine i) the effects of positive and negative everyday incidents on stress system activity, ii) the temporal lags between incidents and biochemical reactions, and iii) the types of biochemical reaction patterns. The complex nature of real-life conditions led us to develop a specific approach to psychosomatic research, based on extensive single-case studies. **Methods:** Three patients with SLE collected their entire urine for at least 50 days in 12-hour intervals for the determination of cortisol (RIA) and neopterin (HPLC), a cellular immune parameter. Additionally, they answered questionnaires (e.g. daily routine, emotional states) and recorded psychosocial incidents every 12 hours. Incidents were discussed with the patients in weekly interviews (Incidents and Hassles Inventory, Brown and Harris). Statistical time-series analysis consisted of ARIMA modeling and cross-correlational analyses. **Results:** In our first "integrative single-case study" (Case 1) (using a simpler design) we were able to demonstrate that stressful incidents were associated significantly ($p < .05$) with an increase in urine neopterin 48 hours later. In our second and third single-case studies (Cases 2 and 3), it was shown that stressful incidents were followed by cyclic patterns in urine cortisol and urine neopterin (cortisol: increase 12 to 24 hours after incident, decrease 36 hours after; neopterin: decrease 36 hours after incident, increase 60 hours after). In addition, in Case 2, emotionally pleasing incidents were associated with biochemical reactions that sharply contrasted with the reactions to stressful incidents (cortisol: decrease 36 hours after incident, increase 48 hours after; neopterin: increase 24 hours after incident, decrease 84 hours after). **Conclusion:** When investigating the relationship between psychosocial incidents and biochemical activity in SLE, thoughtful consideration of the data's complexity (e.g. dynamic nature of psychosomatic phenomena, personal meaning of incidents) is recommended to avoid flawed findings.

296 - EFFECTS OF ACUTE PSYCHOLOGICAL STRESS ON THE PRODUCTION OF REACTIVE OXYGEN SPECIES (ROS)

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Introduction: Acute psychological stress has a number of characteristic effects on the human cellular immune system: specially peripheral numbers and function of natural killer cells as a part of the innate immune system are strongly effected. However possible effects of psychological stress on the function of another arm of innate immune system, namely phagocytic cells, has up to today hardly been investigated and the few published results are in some parts contradictory. The aim of this study is to investigate the longlasting effects on phagocytic cells effected by psychological stress measured by the production of reactive oxygen species (ROS). **Methods:** Ten healthy subjects (five female, five male) took part in a stress test for evaluation of ROS production. An other day the ROS production was measured at a 'rest' day. The first blood sample was obtained, 5 min. later we started the standardized computer-based stressor at the 'stress' day. After the stress phase subsequently additional blood samples were collected. The amount of ROS was measured by chemiluminescence. The effect of the stressor was measured by the change of blood pressure and the heard rate during the stress test. Moreover we used standardized questionnaires to measure the acute anger (STAXI) and anxiety (STAIG). **Results:** At 10.00 a.m. we

observed no significant difference in the production of ROS between the 'rest' day and the 'stress' day (which was unexpected). At 10.30 a.m. however we found a significant lower production of ROS at the 'stress' day. The following results up to 12.00 p.m. gave no unique determined trend. There was a significant difference between the 'stress' day and the 'rest' day with a decrease at the 'stress' day at 2.00p.m. and 4.00p.m... In general the production of ROS increases from 2.00 a.m. to 4.00 a.m. both on 'stress' day and on 'rest' day. This result confirms the circadian rhythm described in the literature. Conclusion: This study was the first which investigated the production of ROS up to hours after the stress test. The results show a lower production of ROS after psychological stress for a longer time. This is surprising because in several other studies an increase of chemiluminescence was found. But all of these studies are severely hampered because of the fact that they did not include an unstressed control group. Just this seems to be important because of the circadian rhythm.

212 - EMOTIONAL AND BEHAVIOURAL DISORDERS IN CHILDREN LIVING WITH A PARENT SUFFERING FROM CANCER

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Background: Children's suffering when a parent is followed up for a cancer is supposed to be frequent but underestimated. Children are often insufficiently informed about the illness of their parent, in order to be protected, but such a communication defect can even more disturb their behaviour and their emotional balance. Objective To compare three groups of children aged 7 to 18, according to the disease their parent is followed up for : cancer (C), insulin dependent diabetes (IDD) or renal transplantation (RT) ; and to explore the links between children's suffering and the openness to discuss cancer in family (ODCF questionnaire adapted for any other chronic and severe disease), assessed by the ill parents himself/herself. Methods: Questionnaires were filled out by ill parents (ODCF), children (depression (CDI), anxiety (STAIC), self-esteem (SEI)), or both parents describing their children (CBCL, Conners Scale). Results: Respectively 20 (13 boys, 7 girls), 18 (8 b, 10 g) and 15 (7 b, 8 g) children were included into the study according to their parent's illness (14 C, 10 RT, 10 IDD). The three clinical groups were similar in age but not in sex-ratio or in ill parent's educational level (EL). Several variables assessing children's emotional balance or behaviour were linked to ill parent's sex or EL. After adjusting for these two confounding variables, children living with a parent suffering from cancer (C-ch) compared with the two control group children, showed higher levels of STAIC anxiety (C-ch > IDD-ch, and C-ch > RT-ch). CBCL total score and CBCL internalised disorders (C-ch > IDD-ch and C-ch > RT-ch). Independently of the clinical group, several CBCL scores were negatively correlated with ODCF. Conclusion: Children living with a parent suffering from cancer present with higher psychological distress levels. There is no more communication defect in cancer families, but children's suffering is linked with family's communication style, independently of the disease.

213 - ROLE OF ILL PARENT'S GENDER AND EDUCATIONAL LEVEL ON CHILDREN'S PSYCHOSOCIAL DISTRESS

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Background: Several factors determine the emotional and behavioural impact of a chronic illness affecting one of the parents on the children living in the same family. Objective: To explore the role of ill parent's gender and educational level (EL) on the level of psychosocial distress in children of the same family. Methods: 53 children aged to 7 to 18, having one parent followed up for a chronic and severe disease, such as cancer (C : 13 boys + 7 girls), renal transplantation (RT : 8 b + 7 g) or insulin dependent diabetes (IDD : 7 b + 8 g) filled out different self administered questionnaires assessing depression (CDI), anxiety (STAIC) or self-esteem (SEI) ; their parents filled also out the CBCL and the Conners Scale. Results: The three clinical groups were similar in age but not in sex-ratio or in ill parent's EL. When these three groups were pooled together, emotional or behavioral disorders in children appeared to be higher when the ill parent was the mother

(CBCL total score, somatic complaints and externalised disorders) and lower when EL of the ill parent was higher (most of the scores). Many of these associations persisted after controlling for the clinical group. Conclusion: Suffering from a chronic and severe disease has an higher impact on the children living with the ill parent if the latter is the mother. EL of the ill parent can moderate such an impact. These results should be taken into account for implementing psychosocial support to the family circle of medically ill.

96 - ATOPIC DERMATITIS - EXPERIENCE WITH PSYCHOTHERAPY

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Atopic dermatitis is a frequent disease in dermatologic profession. We appraise that 5-10% child population in European countries is stroke by atopic dermatitis before they reach the age of 15. Atopic dermatitis has a strong impact on the quality of life. Dermatological problems may affect psyche, while psychological factors may directly or indirectly influence the cutaneous manifestations and outcome. Skin diseases appear to affect people with more sensitive emotions. In addition, personality structure shows more distress. Another symptom is a tardive emotive social maturation and increased dependence on family, especially on mother. Most patients suffer from a lower motivation level in connection with minority feeling. In the personality of the children with atopic dermatitis depressive and anxious tendencies seem to appear on a higher level. These are reasons for the necessity of individual and family psychotherapeutic methods.

76 - DOES DEPRESSION MODULATE AUTONOMIC CARDIAC CONTROL?

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It has been evidenced that depressed patients have an increased risk of cardiovascular morbidity and mortality as well as an insufficient neurocardiac control. However, it is unclear what the underlying mechanisms are. Against this background, we investigated heart rate variability (HRV) – as an indicator of psycho-neuro-cardiac control – in untreated outpatients with different degrees of depressive symptoms during their first visit to our department. HRV was assessed by means of conventional ECG linked to a personal computer and evaluated by specified Software (ADI Inc., Australia). Level of depression was assessed with the Beck depression inventory (BDI). The patients were divided in two groups (11 each) by median split. Heart rate (HR), HRV and BDI of the two patients group were compared to those of 11 sexes and age matched healthy subjects (BDI < 8). The patient groups had BDI 9-19 (minor to moderate depression) and BDI 20-33 (moderate to severe depression), respectively. Multivariate analysis (covariate age) was carried out with group as an independent factor (low vs. high BDI score) and autonomic indices (HRV, HR, resting blood pressure) as dependent variables. A significant group effect on RMSSD was found not only during relaxed rest ($F=3.60$, $p=0.025$) but also when patients performed metronomic respiration ($F=7.35$, $p=0.001$). Subjects of the control group (BDI < 8) showed a significantly higher mean RMSSD as compared to those with moderately or markedly elevated BDI scores. Further, there was an inverse correlation between BDI score and RMSSD under resting condition ($r=-0.34$, $p=0.055$) and during deep respiration ($r=-0.46$, $p=0.008$). Within this population, we demonstrated that HRV is decreased in patients with a low level of depressive symptoms to a similar extent when compared to those with more severe psychopathology. One may speculate that altered autonomic cardiac control links depressed mood with high risk mortality by increasing the number of cardiac events. In conclusion, disturbance of autonomic cardiac control may account for increased cardiovascular morbidity and mortality in patients suffering from different degrees of depression. Health care programs comprising anti-depressant therapy i.e. psycho education, psychotherapy, psychopharmacological treatment and physical exercise (e.g. stretching, walking) may improve the course of comorbid cardiovascular diseases in patients with mild to moderate as well as severe depression.

214 - THE IMPACT OF ICD DISCHARGES, ATTACHMENT STYLES AND SOCIAL SUPPORT ON ANXIETY AND DEPRESSION

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Objective: It is well known that many patients with an implantable cardioverter defibrillator (ICD) suffer from psychological strain. We examined how many ICD-patients suffer from anxiety and depression and we examined the impact of ICD discharges, attachment styles and social support on anxiety and depression level. Preliminary results are shown. **Methods:** We investigated a sample of 119 outpatients with the following self report scales: The State-Trait-Anxiety Inventory (STAI), the Beck Depression Inventory (BDI), a questionnaire for the assessment of attachment styles (BFPE), a short form of a social support questionnaire (F-SOZU) and a specifically designed ICD-questionnaire. **Results:** Nearly 40 % of the ICD-patients reported enhanced anxiety levels and about 40 % reported enhanced depression levels. Although only 50 % of the ICD patients received discharges at all, we found a significant impact of ICD discharges on anxiety and depression levels. On the other hand there is a significant association of attachment styles and social support with anxiety and depression. Patients with secure attachment patterns showed lower anxiety and depression levels compared to those with insecure attachment patterns. The more social support patients reported, the lower were their scores on anxiety and depression measures. **Conclusions:** The number of discharges as well as attachment patterns and social support have impact on the development of psychological disturbances.

21 - SELF-RATED HEALTH AND ITS DETERMINANTS AS RELATED TO CORONARY ARTERY DISEASE SEVERITY

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Objective: The purpose of the study was to analyse self-rated health of angina patients in the context of coronary artery disease (CAD) severity. We also searched for determinants of self-rated health status taking into account both sociopsychological and biomedical factors including extent of coronary atherosclerosis in angiography assessment. Patients and methods. Our study included 100 patients with stable angina, mean age $49,3 \pm 6,5$ qualified for diagnostic coronary angiography. Subjects were administered Health Complaints Scale for symptom status assessment and a battery of psychometric questionnaires for the assessment of social network size, social support, coping styles, life stress level and indices of socioeconomic status. **Results:** We showed significant gender-related differences in symptom scores: females reported more somatic complaints after controlling for CAD severity ($p=0,001$). Subjects without significant coronary stenoses also showed paradoxically higher symptom scores ($p<0,05$) after controlling for the impact of gender. Variability of symptom score was best explained in biopsychosocial (holistic) model. Regression equation for this model including four factors: functional status in CCS Classification, Body Mass Index, emotion-focus coping style and life stress level, accounted for 37% of the variability. Biomedical and sociopsychological models explained respectively 16% and 21% of symptom-score variability. **Conclusions:** Extent of CAD in angiographic assessment does not directly affect self-rated health of angina patients. Important predictive role of sociopsychological factors in this matter should be taken into account in clinical care of angina patients.

160 - A RANDOMISED CONTROLLED STUDY OF COGNITIVE BEHAVIOURAL THERAPY FOR HYPOCHONDRIASIS

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Background: Hypochondriasis is characterized by the fear or belief that one has a severe illness based on misinterpretation of bodily symptoms. It has been regarded as a condition difficult to treat, but the somatosensory amplification theory of hypochondriasis has led to the development of a well-defined cognitive-behavioural treatment, which has questioned this understanding. **Hypothesis:** Hypochondriasis is accessible for treatment. Different strategies of treatment are effective in reduction of symptoms and disease related behaviour. Specific cognitive treatment is significant more effective than non-specific

psychiatric consultation. **Method:** Patients with hypochondriasis was assessed using SCAN for ICD-10. By central randomisation the patients were allocated to cognitive behavioural therapy (CBT), consultation sessions or waiting list. The patients received 16 sessions over a period of four month. Assessment was made at the beginning of the therapy, halfway and at the end of the treatment. Further assessments are being made four and twelve month after the end of treatment. **Result:** 236 patients mainly referred from GP were assessed for the trial. 80 consecutive patients was included and randomised according to the protocol. 6 patients were excluded post-randomisation because they did not meet the inclusion criteria. 9 patients did not accept the randomisation and 4 patients dropped out under treatment. 61 patients completed the treatment with 30 patients completing counselling and 31 patients completing CBT. In an independent group analysis of patients receiving either treatment or waiting list, there were significant reductions of all but one primary and secondary outcome in benefit of the treatment group. In an independent group analysis of patients receiving psychiatric counselling or CBT, there were a significant reduction of one of the two primary outcome measures in benefit of the CBT group and a non-significant reduction of the other of the two primary outcome measures.

236 - JOINT HYPERMOBILITY SYNDROME AS A NEW BIOLOGICAL MARKER OF FEAR

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Objective: The purpose of this study was to evaluate fears according to the intensity of presentation and frequency in a sample of hypermobile and non-hypermobile subjects from a rural population. **Design:** Community cross-sectional study conducted in a rural town. **Subjects and Methods:** A sample consisting of 1305 subjects selected from the municipal registry of a Catalan rural town were assessed for Joint Hypermobility Syndrome using Beighton's criteria and for fear intensity and frequency by the self-administered modified Wolpe Fear Scale (100 items). Prominent fears defined as scoring "very" or "extremely" intense were compared between hypermobile and non-hypermobile subjects. The analysis was carried out separately for men and women. Non parametric analysis (Mann-Whitney) was applied throughout. **Results:** Joint hypermobility Syndrome was found in 19.9% of women and 6.9% of men. 87% of subjects referred one or more prominent fears (scores of "very" or "extremely" intense). 36 fears out of the 100 fears evaluated scored as prominent for men and women together, being 44 items in women and 39 in men separately. 43 out of the 44 prominent fears in women and 36 out of 39 in men scored significantly higher in the hypermobile group compared to the nonhypermobile group. Comparison of the total score of the Wolpe Fear Scale between the hypermobile and non-hypermobile groups (both in men and women) also showed significant differences, therefore reinforcing the hypothesis that intensity of fears is greater in subjects with Joint Hypermobility Syndrome. **Conclusion:** Previous research has indicated that anxiety disorders are more prevalent in hypermobile subjects both in a clinical population and the general population. The number and intensity of fears has also shown to be significantly higher in the hypermobiles for both men and women. The already defined genetic predisposition as well as the greater vegetative vulnerability could explain these differences. The Joint Hypermobility Syndrome is clearing a new path to further understand the relationship between somatic and psychological symptomatology.

286 - SIFTING THROUGH SYMPTOMS TO CATCH

DEPRESSION Stewart D. FRCPC, Professor and Chair of Women's Health, University of Toronto University Health Network Toronto, Ontario, Canada

Aim: 1.) Assess the unmet needs in depression and in current antidepressant therapy with special consideration for women. 2.) Discuss the clinical considerations of depression beyond mood and anxiety: identifying the broad range of symptoms from the emotional to the physical. Depression has long been recognised as a debilitating emotional illness, especially among women, creating a large global burden of mental illness. This recognition has led to a substantial body of work directed at decreasing the emotional aspects of depression, but most of that work has ignored a vital aspect of the depressive state: the burden of the physical, often painful, symptoms of depression. Neither current assessment tools nor current treatments have adequately addressed this problem, resulting in many patients with depression not

having all their symptoms treated to resolution, thereby reducing their quality of life and increasing the chances of recurrence. Physical symptoms and painful physical symptoms are especially important to consider in assessing and treating women, as will be shown with data from a national population survey. To treat all patients completely and reduce the global burden of depression both emotional and physical symptoms of depression must be considered.

121 - EFFECTS OF PSYCHOSOMATIC

INTREATMENT ON EMOTIONAL AWARENESS Subic-Wrana C. Department of Psychosomatics and Psychotherapy, University of Cologne, Germany

Today alexithymia is understood as a deficit in the cognitive processing of emotion. The Levels of Emotional Awareness Scale (LEAS; Lane et al. 1990) is a performance measure which A) in previous studies demonstrated its ability to detect deficits in emotional awareness in a reliable and valid manner and which B) has no overlap with self reported negative affect. In a sample of inpatients in psychodynamic orientated psychosomatic intreatment (N=249) consisting of 6 diagnostic groups (depression; anxiety and compulsive-obsessive-, adjustment-, eating-, somatoform disorders and psychological factors related to somatic disorders) changes in LEAS and scales of self reported negative affect (STAI, SCL 90 R) were compared at onset and end of treatment controlling for the effects of gender, age, educational level and interactions between the LEAS and self reported negative affect. Self reported negative affect decreased with treatment in all diagnostic groups. The LEAS scores increased with treatment in the groups with somatoform disorders and psychological factors related with somatic disorders which indicates an improvement in emotional awareness. We could demonstrate A. that psychodynamic orientated psychosomatic treatment can improve the cognitive processing of emotions in those diagnostic groups where alexithymic features are discussed as being related to the onset and duration of the disorder and B. that this change is independent of changes in self-reported negative affect.

192 - PERCEPTION OF STRESS: A STATISTICAL

INFARCTION RISK FACTOR Svitavsky M., Germering, Germany.

In the empirical blind study under everyday conditions over a period of 8 hours the following questions were investigated: 1. Is there a significant difference in a randomly selected sample of patients having a cardiovascular disease in the perception of stress in every day life between infarct patients and infarct-free patients having a comparable infarction risk? 2. Which level does the statistical validity of the perception of stress have compared to the known risk factors hypercholesterolemia, hypertension and abuse of tobacco? 43 randomly selected ambulatory patients of the outpatient's department of myocardial infarction of the University Hospital Innsbruck were included in the blind study. 24 test persons of an average age of 57,76 years had suffered from at least one myocardial infarction. 19 persons of an average age of 55,03 years consulted the outpatient's department for different cardiovascular complaints. No statistically significant difference was found between the group-dependent distributions of hypercholesterolemia, hypertension and abuse of tobacco. The perception of stress was measured continuously by correlating the heart rate (Holter monitoring) with the subjective estimate of strain (4 step rating scale) during 8 hours. Infarct-free persons could perceive stress more sensitively in a statistically significant way ($p = .016$) compared to infarct patients. Perception of stress reached the highest statistical validity compared to other risk factors: perception of stress 71.0 %, hypercholesterolemia 61.2 %, systolic hypertension 48.2 %, diastolic hypertension 62.0 %, abuse of tobacco 61.9 %. Pathogenetically this result is twofold important. 1. The present field study confirms investigations with experimental exposure to strain (Jenkins, 1976; Croog and Levine, 1977; Lipowski, 1988; etc.), which show that myocardial infarction patients have a higher pain threshold compared to angina pectoris patients. 2. Perception of stress is a statistically valid discriminating criterion between infarct patients and patients having different cardiovascular diseases.

245 - WRITTEN INFORMATION ABOUT THE REFERRAL TO A PSYCHOLOGIST IN A

MULTIDISCIPLINARY PAIN CENTRE IS USEFUL Van Hamme G, Vissers K, Van Zundert J, Puylaert M, De Bie J. Ziekenhuis Oost Limburg, Genk, Belgium

Background and introduction: In a university affiliated hospital (820 beds) out-patients with chronic pain are seen by different health workers (anaesthesiologists, psychologists, nurses, physiotherapists) in a multidisciplinary pain clinic. Some patients find it difficult or do not understand why they have to see a psychologist and have to fill out a battery of psychological questionnaires. This results in frequent drop-outs from further assessment and treatment. Patients and methods: We randomly provided a group of first time patients with either only a verbal explanation (group A, $n = 51$) or (the same) verbal information and written information (flyer) about the role of the psychologist (group B, $n = 55$). This happened during the intake with the anaesthesiologist. First we looked at drop-out rates for the first appointment with the psychologist. In the two groups patients were asked to fill out an 8-item self developed questionnaire to look at differences in emotions and knowledge about the referral. Results: 10/51 (19, 6 %) of the patients in group A did not show up at the first appointment with the psychologist whereas only 6/56 (10, 7 %) did not show up at their first appointment with the psychologist in group B (X^2 , $p < 0.038$). In the group that did show up, 8/41 (19, 5 %) of the patients in group A did not fill out the questionnaires whereas only 4/50 (8 %) did not fill out the questionnaires in group B (X^2 , $p < 0.0056$). In group B the answers to the questionnaire suggest that patients are better informed about why they are referred to a psychologist. However the answers to the emotional items on the questionnaire were not different in the two groups. Conclusions: Giving written information about the role of the psychological function in a pain clinic proves to be a useful tool to enhance the understanding of the relevance of multidisciplinary treatment. Emotional reactions to the referral to a psychologist however do not seem to be influenced by giving written information about this referral. We conclude that giving written information, in addition to verbal information, is useful to improve multidisciplinary practice and patient adherence.

111 - ILLNESS IMPACT AND WELL-BEING IN

PSORIASIS PATIENTS DO NOT RELATE TO ILLNESS

SEVERITY. Vingerhoets A. Tilburg University, Tilburg, The Netherlands.

The aim of the present study was to explore the relationship between psoriasis severity, as assessed by dermatologists, on the one hand, and illness impact and well-being, on the other hand. We further compared well-being of patients to available norm data. Participants were 59 patients with psoriasis (33 men/ 25 women/ 1 missing; age range: 14 - 83). The following measures were administered: (1) The Pictorial Representation of Illness and Self Measure - Revised (PRISM-R), yielding a Self-Illness Separation (SIS) and Illness Perception Measure (IPM); (2) well-being; (3) subjective health status; and (4) quality of life. In addition, the Psoriasis Area and Severity Index (PASI) was determined by dermatologists. The psoriasis patients scored significantly below the norm data on subjective health status ($t = -2.91$; $p < .01$) and psychological well-being ($t = -2.96$; $p < .01$). Quality of life however did not differ significantly. Significant negative correlations were found between IPM and subjective health status ($r = -.51$, $p < .01$), quality of life ($r = -.33$, $p < .05$) and psychological well-being ($r = -.54$, $p < .01$). In contrast, SIS did not correlate significantly with any subjective measure. Finally, no significant associations were found between the PASI score and any of the disease impact and well-being measures. In a regression analysis with PASI as the dependent measures also none of the well-being measures showed up as a relevant predictor. It is concluded that there is no clear association between illness severity and the subjective experience of disease. It is plausible that well-known factors as personality, coping, and social support moderate this relationship. The data further suggest that PRISM-R variables yield valuable additional information to existing well-being questionnaires.

132 - THE PICTORIAL REPRESENTATION OF SELF MEASURE AND ILLNESS REVISED (PRISM-R): MEASURING TREATMENT OUTCOME IN WHIPLASH PATIENTS **Vingerhoets A. Tilburg University, The Netherlands**

The aim of the present study was to explore the utility of the PRISM-R as a measure for treatment outcome in whiplash patients. Büchi and Sensky (1999) introduced the PRISM as a nonverbal measure of suffering. A disk representing the illness has to be placed in a rectangular representing the patient in his world. The distance between the disease and the self yields the Self - Illness Separation (SIS) measure. We tested a slightly revised version of the PRISM (PRISM-R), allowing the patients to choose the illness disk out of three sizes: smaller, equal to, and larger than the self, yielding an additional Illness Perception Measure (IPM). Participants were 21 whiplash patients (4 men/ 17 women; age range: 20 - 56) undergoing a rehabilitation treatment. In addition to the PRISM-R measures concerning well-being, subjective health status, and quality of life were administered at the beginning and end of the rehabilitation program. The whiplash patients scored significantly higher at the end of the treatment on subjective health status ($t = -3.27$; $p < .01$) and psychological well-being ($t = -2.57$; $p < .05$). Quality of life however did not differ significantly. Furthermore SIS was significantly larger ($t = -2.32$; $p < .05$) and IPM significantly smaller ($t = 3.51$; $p < .01$). It is concluded that the PRISM-R is sensitive to changes in well-being in whiplash patients. The data suggests that the PRISM-R is a suitable instrument to measure treatment effects in this patient group. Future research is recommended to investigate whether the PRISM-R can be used to measure treatment outcome in other patient populations.

295 - EFFECTS OF TRAIT ANGER AND SALT SENSITIVITY ON CARDIOVASCULAR AND CORTISOL STRESS REACTIVITY IN YOUNG MEN

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Background: Salt sensitivity (SS) and trait anger (TA) have been shown to be associated with enhanced cardiovascular stress reactivity and potential risk for hypertension. Little is known about interactive effects of these two factors and their combined influence on the cortisol stress response. Therefore, our study set out to determine effects of SS and TA on cardiovascular and cortisol reactivity to mental stress in young men. Subjects high in both parameters were expected to be most reactive. **Methods:** 70 male students (25.4 ± 2.6 years of age) were phenotyped for SS using the protocol of Sharma (1994). SS was defined as a significant drop in mean arterial pressure from a high salt to a low salt diet period. Phenotyping revealed 18 salt sensitive and 52 salt resistant subjects. TA was measured by Spielberger's STAXI. The sample was divided in subjects with high versus low TA by median split. To induce mental stress subjects performed an information-processing task under time pressure. Heart rate (HR) and blood pressure (BP) were recorded continuously. Serum cortisol levels were measured at baseline, after mental stress and at 20' recovery. ANOVA were used to compare subjects with high versus low SS. **Results:** Salt-sensitive subjects showed the greatest cardiovascular and cortisol reactivity, indicated by significant main effects on these variables. For TA, we confirmed a main effect for BP and an interaction effect for cortisol: High TA was associated with an enhanced cortisol stress response only in salt sensitive subjects. Salt sensitive subjects high in TA had the highest cortisol levels. **Conclusion:** Our data could show that SS is associated with enhanced cardiovascular and cortisol stress reactivity. High TA was associated with an enhanced cortisol stress response only in salt sensitive subjects. As expected, there was additional diagnostic information when regarding both risk factors, i.e. the high risk group of salt-sensitive plus high TA subjects showed the greatest stress reactivity (except HR) compared to all other groups. Prospectively, it would be interesting to verify the predictive value of this risk constellation for the development of hypertension. This remains subjects to follow-up.

71 - PSYCHOSOCIAL RISK FACTORS BEFORE AND AFTER ORGAN TRANSPLANTATION **Wagner-Huber R, Götzmann L, Klaghofer R, Scheuer E, Buddeberg C. Department of Psychosocial Medicine, University Hospital Zurich, Switzerland**

Background: So far, researchers have not achieved a good understanding of psychosocial factors and their effects on transplant patients' quality of life, life satisfaction, psychological and physical well-being before and after transplantation. Yet, about one third of organ recipients show relevant psychological problems. The study was designed to investigate the role of psychosocial (risk) factors in organ transplant patients. **Methods:** A consecutive sample of transplant patients was recruited at the University Hospital Zurich during the routine interdisciplinary screening procedure before waiting list placement. Participants were interviewed and filled out standardised questionnaires every 3 months during time on the waiting list and at 6, 12, and 24 months post-operation. **Results:** In the ongoing research project, N=261 participants have entered the study prior to waiting list placement. That is, n=21 heart, n=70 liver, n=43 lung, n=49 stem cell, and n=78 kidney transplant candidates. Recruitment was completed by the end of August 2003. The average age of patients was 48.6 years and 66% were men. Considerable differences between organ groups regarding psychosocial factors could be observed. At the time of the psychological screening interview prior to waiting list placement quality of life, life and health satisfaction of transplant candidates were significantly lower compared to a healthy population while anxiety and depression were only slightly increased. When asked, one third of the patients stated a need for psychological counselling, whereas study physicians assessed 50% of them in need of psychological counselling. On the waiting list the above mentioned levels did not change considerably. Preliminary results indicate that after organ transplantation there is a significant increase in quality of life, life and health satisfaction while anxiety and depression score are close to normal. **Conclusion:** Quality of life and life satisfaction is significantly reduced for patients waiting for an organ transplantation. Psychological counselling should be available at all stages of the organ transplant process.

323 - DEPRESSION AND ANXIETY SYMPTOMS AS INTEGRATIVE PART OF MENOPAUSAL SYNDROME – HOW FAR ANTI-DEPRESSIVE TREATMENT SHOULD BE INTEGRATIVE PART OF THE THERAPY.

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Most cases of the emotional disorders in women in the menopausal period do not comprise in the traditional bio-psycho-social disease model. Orthodox use of this model for interpretation of psychological and somatic complaints reported by women in the perimenopausal period, often leads to dangerous polypragmasy in pharmacological treatment, support patient escape in the disease and accelerate disability progression. One of the main therapeutic problems is depressive and anxiety disorders treatment, which are the integral element of the menopausal symptoms syndrome. In the centers with high quality medical services, which are engaged in menopause problems treatment, most female patients chronically take psychotropic medications. Adverse effects associated with pharmacotherapy are the reason, for which most female patients from those centers discontinue treatment or do not comply with attending doctor recommendation. In a light of our clinical observations concerning 1521 cases observation, author discusses available therapeutic alternatives for chronic administration of the psychotropic and hormonal medications in women during menopausal period.

189 - COMPLEX CHILDHOOD ABUSE, ATTACHMENT DISORDERS AND HEALTH PROBLEMS **Agnieszka Widera - Wysoczańska, Ph.D, University of Wrocław Institute of Psychology, Clinical Department, Poland**

In this study, correlations between health problems, including their duration, and the type of childhood trauma, the age at which the person experienced it, and the identity of the perpetrator were investigated in a random sample. The Intimate Situations Questionnaire and the Family Childhood Abuse Questionnaire were used to recognize the types of trauma, and the Questionnaire of Somatic Problems to investigate health problems. The results of the study showed that a history of childhood trauma correlated significantly with several somatic problems. Long-term health problems and poorer overall health were more likely to affect victims of sexual abuse, the mother's alcohol abuse, and emotional abuse than people who met the criteria for

physical abuse and the father's alcohol abuse. Incest, childhood sexual abuse with penetration, was associated with the greatest number of physical symptoms. Persons raised by an alcoholic mother showed more somatic problems than those raised by an alcoholic father. The more mother-child attachment problems there were, the earlier the somatic problems appeared, the longer they lasted, and the more intensive they were. The psychotherapeutic intervention issue is discussed.

250 - WHO NEEDS WHAT? STAGE-SPECIFIC HELP FOR PATIENTS WITH RHEUMATOID ARTHRITIS

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Arthritis patients are advised to undertake regular physical activity to stay healthy and maintain treatment outcome. Rehabilitation treatment aims to motivate patients to be physically active after discharge. Motivational processes can be explained by psychological stage models. Such stages are for example (1) non-intentional stage (inactive without intention to start an activity), (2) intentional stage (decided to start but still inactive) and (3) active stage (exercising on the recommended level). The present study focused on the role of stage-specific variables. The hypotheses were: (a) negative outcome expectancies are higher in the non-intentional than in the intentional inactive and active stages, (b) positive outcome expectancies and action planning are higher in the intentional stage than in the two other stages, and (c) self-efficacy expectancies show increasing patterns across all stages. We conducted a cross-sectional study with N=551 orthopedic rehabilitation patients. An ANOVA was performed to see how patients in the different stages showed continuous and discontinuous patterns in social-cognitive variables. Lower levels of negative outcome expectancies appear in the intentional stage than in the non-intentional stage. Positive outcome expectancies were lower in the non-intentional stage than in the intentional and actional stage. Action planning was higher in the intentional stage than in the two other stages. Across all stages, self-efficacy and intention increase continuously. In view of these results, we would suggest that it might be helpful to tailor interventions to the stage of the patient and target stage-specific variables. For example, interventions for patients in the non-intentional stage should seek to reduce perception of negative consequences in order to help patients to perceive the advantages of changing their exercise behavior. Treatment in the intentional stage should especially support self-efficacy and realistic action plans to adopt physical exercise. In the active stage patients need self-efficacy to successfully experience their ability to transfer action plans into exercise behavior; the positive consequences of such action will make themselves apparent in daily life, even where exercise barriers exist.

256 - PSYCHOLOGICAL DETERMINANTS OF SNS RESPONSE TO PSYCHOSOCIAL STRESS IN RHEUMATOID ARTHRITIS.

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Rheumatoid arthritis (RA) is a chronic inflammatory disease, which has been once considered to be one of the 'holy seven' classical psychosomatic diseases. Both clinical observations and prospective studies indicate that psychological stress, particularly interpersonal in nature (so called 'psychosocial') may contribute to the exacerbation of RA. The underlying biological mechanisms remain unclear. Simultaneously, neurohormonal studies of the last decade on RA point to the defective response of the hypothalamic – pituitary – adrenal (HPA) axis to cytokines released from the focus of inflammation with inadequately low cortisol level to the activity of the inflammatory process (hypocortisolism). Since HPA axis and SNS (Sympathetic Nervous System) are the two major peripheral limbs of stress response, the hypothesis of HPA axis hyporeactivity to psychological stress in arthritis with overbalance of SNS and possibly different immune system reaction has arisen. The present study was an attempt to meet the postulate of integrative approach to stress research, taking into account both biological and psychological level. It aimed to evaluate: 1. the response of: 1. hypothalamic-pituitary-adrenal (HPA) axis (by plasma cortisol assay) 2. sympathetic nervous system (SNS) (by plasma epinephrine and norepinephrine assay) 3. immune system (by whole blood determination of lymphocytes subpopulations) to acute, experimentally-induced psychosocial stress (Trier Social Stress Test - TSST) in patients with relatively early rheumatoid arthritis, as

well as 2. psychological determinants of the possible differences in such a response between arthritis and healthy controls (by inventory examination of: depression - BDI, anxiety as a trait - STAI, sense of coherence - SOC-29, alexithymia - TAS-20, stress coping style - CISS). The results have indicated that response of the HPA axis, immune system and noradrenergic part of the SNS in arthritis with early RA was similar to controls. The response of the adrenergic system was however different. In opposite to controls, in whom epinephrine level increased only during the stress-inducing task, arthritis presented with a strong adrenergic arousal (high epinephrine level) already before the task became for them evident. Cluster analysis has revealed it particularly occurred in arthritis with high scores of depression, emotion-focused coping style and alexithymia.

51 - ACCEPTANCE OF ILLNESS IN PSORIASIS

VULGARIS PATIENTS. Anna Zalewska, Joanna Miniszewska, Zygryd Juczynski, Jan Chodkiewicz, Anna Sysa-Jedrejowska, Department of Dermatology, Medical University of Lodz and Health Psychology Department, Lodz, Poland.

Acceptance of chronic disease is a very complex process, influenced by both external factors (such as environmental attitude, life circumstances of the patient) and individual characteristic of each patient (as for example beliefs, expectations, coping strategies with stress). Acceptance of illness is a very important feature in the whole process of adaptation. This parameter is combined with restrictions imposed by the illness. The higher acceptance the better adaptation, the lower feelings of psychological discomfort and the higher probability of adherence to medical advice. The aim of our study was to establish correlations between acceptance of illness and selected personal resources such as age, sex, disease duration and severity of the disease. The study comprised 100 psoriasis vulgaris patients (30 female, 70 male) aged 17-62 years (mean \pm SD - 39.40 \pm 11.35), who were hospitalized in the Department of Dermatology, Medical University of Lodz. The following research techniques were employed: Acceptance of Illness Scale (Felton, Polish adaptation by Juczynski); Generalized Self-Efficacy Scale (Schwarzer, Jerusalem, Polish adaptation by Juczynski); Mental Adjustment to cancer (a pilot version); multidimensional Health Locus of Control Scale (Wallston, DeVellis, Polish adaptation by Juczynski); Life Orientation Test (Scheier, Carver, Bridges, Polish adaptation by Juczynski); Psoriasis Area and Severity Index (PASI scale by Fridriksson and Petersson). Mean results of acceptance of illness (mean \pm SD - 26.53 \pm 7.29) are comparable with the ones obtained by patients with other diseases (such as haemodialyzed ones, suffering from multiple sclerosis, breast and uterus carcinoma, diabetics or alcohol addicts). It was demonstrated that age, sex, disease duration and its severity do not correlate with acceptance of illness. Among psychological variables, there is a positive correlation between acceptance of illness and optimism. A negative correlation was found between acceptance of illness and coping strategy called focusing on emotions. It is quite puzzling that a strong belief that own health is the result of others influence (particularly medical care providers) correlates with lower acceptance of illness and thus with higher level of psychological discomfort.

60 - EXERCISE PLANNING AND STRATEGY USAGE IN YOUNG, MIDDLE-AGED, AND OLDER

REHABILITATION PATIENTS Ziegelmann JP, Lippke S, Merten F. Free University Berlin, Department of Health Psychology, Berlin, Germany.

Planning and strategy usage can be important mediators in bridging the gap between intentions and subsequent behavior. Exercise related strategy usage and exercise planning was investigated in young, middle-aged and older orthopedic rehabilitation patients (age range: 18-80 years). All patients were expected to adhere to a strict exercise regimen after discharge from rehabilitation. As part of a longitudinal study, N = 443 patients completed questionnaires assessing the amount of physical activities performed pre-rehabilitation and 6 months after discharge. In addition, the extent of exercise planning and strategy usage after discharge from rehabilitation was assessed. Planning was subdivided into two constructs: action planning (planning when, where, and how to exercise) and coping planning (planning how to exercise in the face of barriers such as health related problems or conflicting interests). Strategies entailed selection, optimization, and compensation (SOC). Hierarchical regression analyses indicate that baseline physical

activity, action planning and coping planning are predictive of physical activity six months after discharge. SOC strategy usage was predictive of physical activity over and above baseline activity and both planning concepts. Neither age nor age by strategy or planning interactions emerged as significant predictors. Results indicate that the exercise specific strategies of SOC are useful in the prediction of health behavior change in the exercise domain in addition to the more established planning construct. The effectiveness of planning and strategy usage with regard to physical activity seems not to be age dependent. Interventions fostering strategy usage and planning might be effective regarding exercise adherence across all age groups. Examples of such interventions specific for rehabilitation patients will be discussed.