

## Posters

Saturday, April 17, 2004

### Poster Session 2: Psychopathology, Diagnosing, Classification

#### P01

Attributional style and self-esteem in persecutory delusions

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The hypothesis that persecutory ideation serves a defensive function is based on findings showing an exaggerated 'self-serving bias' on attributional style tasks and an exaggerated positive self-esteem in subjects with persecutory delusions. Previous studies, however, have typically only included direct measures of these factors, and have rarely included indirect (or incidental) measures. In the present study, 2 groups of clinical subjects (schizophrenic patients with and without persecutory ideas) and 2 groups of nonclinical subjects (subjects with and without delusion-proneness) were included. All subjects completed direct measures of attributional style (IPSAQ; Kinderman & Bentall, 1996a) and self-esteem (PQQ; Kinderman & Bentall, 1996b), and indirect measures of attributional style (PIT; Winters & Neale, 1985) and self-esteem (SRIRT; Bentall & Kaney, 1996), in addition to the Beck Depression Inventory (Cottraux et al. 1985). After controlling for depression, results revealed certain significant group differences. In particular, for negative events, paranoid patients and subjects with delusion-proneness revealed an exaggerated self-serving bias on the IPSAQ (tendency to attribute negative outcomes to external causes), but an internalising bias on the PIT (tendency to attribute negative outcomes to one's own actions). Although paranoid patients and non-clinical subjects with delusion-proneness revealed significantly higher positive self-evaluations on the PQQ, results from the SRIRT did not reveal any significant group differences. These results suggest that persecutory delusions, at least in part, may serve as a function of preventing low self-esteem thoughts from entering consciousness.

#### P02

Patients at high risk for psychosis: Baseline symptomatology

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In the current study, symptomatology was investigated in a group of patients with a high risk of developing psychosis (n=21) at inclu-

sion. Mean age of the subjects was 22 years, and the group consisted of 15 men and 6 women. Patients were interviewed with the Structured Interview for Prodromal Symptoms (SIPS) and the Revised Bonn Scale for the Assessment of Basic Symptoms (BSABS). In both interviews a score of 3 or more on an item indicated that the symptom is present. This study is part of the European Prediction of Psychosis Study (EPOS). Of the SIPS items, 'Deterioration in role functioning' was most prevalent (present in 76% of the subjects). 'Unusual thought content/delusional ideas' and 'avolition' were also prevalent (both 71%). On the BSABS the symptoms 'unstable ideas of reference' (subject-centrism) was present in 76% (n=16) of the subjects. 'Thought pressure' (52%) and 'thought interference' (38%) was also common. In our group of patients at high risk for developing psychosis both positive and negative symptoms were present.

#### P03

Differentiating psychopathology with the MMPI-2 Goldberg Index and PSY-5 Scales

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The MMPI-2 supports often the clinical decision making process in complex diagnostic problems such as differentiating neurosis from psychosis or psychosis from bipolar disorder. The MMPI Goldberg Index, an arithmetical combination of five clinical scales, has been considered to provide a good estimate for discriminating between neurotic and psychotic profiles. Similarly, the MMPI-2 Personality Psychopathology Five (PSY-5) scales have been found to be useful in differentiating diagnostic categories. The present study evaluates these findings in a sample of psychiatric patients diagnoses with depressive, psychotic or bipolar disorder, by applying ANOVA and discriminant analysis. The results corroborate the validity of Goldberg's index and find MMPI-2 PSY-5 scale Disconstraint to differentiate significantly between psychotic and bipolar-I disorder. It is concluded that the MMPI-2 Goldberg index and PSY-5 scales can offer an useful contribution to the differential diagnosis of depressive, psychotic and bipolar disorder.

#### P04

Reliability and validity of the Polish language version of the Composite International Diagnostic Interview

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The Composite International Diagnostic Interview (CIDI) is a fully structured instrument designed for assessing mental disorders according to DSM and ICD systems. It is available in many languages. Its Polish version was prepared according to WHO recommendations. The psychometric properties of Polish version of CIDI were assessed using computerized version of the instrument. Two interviewers (clinician and non-clinician) scored CIDI in the group of 290 persons (inpatients, outpatients and healthy people). Independently one clinician evaluated ICD 10 criteria checklist for the whole group. After one week the retest CIDI examination was performed in the group of 60 randomly selected participants. The interrater concordance of CIDI results was excellent while retest results were more diverse (from excellent to fair). The diagnostic agreement between CIDI results and ICD 10 Criteria Checklist diagnoses was good. CIDI is the first diagnostic instrument that was prepared in Polish language according to the WHO recommendations and now is ready to use in different settings.

## P05

Comparison of classic clinical diagnosis with SCAN diagnosis

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**Objectives:** SCAN (Schedules for Clinical Assessment in Neuropsychiatry, version 2.1 WHO 1999) is a set of operationalised instruments aimed at assessing, measuring and classifying the psychopathology and behavior associated with the major psychiatric syndromes of adult life. Diagnostic value of SCAN questionnaire was being verified in a few studies with referential instruments. There are no studies comparing SCAN diagnosis with classic psychiatric diagnosis.

**Methods:** SCAN database from Wrocław is based on EDEN study (European Day Hospital Evaluation, [www.edenstudy.com](http://www.edenstudy.com)). Clinical diagnoses were established by experienced psychiatrists using criteria of ICD-10. SCAN researchers were trained by Prof. Terry Brugha from SCAN WHO centre in Leicester. Validity was assessed by following coefficients: Cohen's kappa (k), Yule's Y and percentage agreement (PA).

**Results:** Clinical and SCAN diagnoses of 220 patients from Wrocław centre have been analyzed. SCAN gave multiple diagnoses - 4,3 diagnoses for 1 patient on average (range 0-15, median 4). Validity in following ICD-10 groups of diagnoses: F2 (PA=84,1%; k=0,65; Y=0,70), F3 (PA=61,4%; k=0,30; Y=0,57), F4 (PA=53,6%; k=0,13; Y=0,62). Psychiatrists gave usually one clinical diagnosis per patient. It cause that part of health problems are 'invisible' during clinical treatment process.

**Conclusions:** Coefficient kappa was moderate and substantial according to Landis & Koch. Other results have been analyzed in this work. SCAN based precisely on ICD-10 classification gave more diagnoses than psychiatrist, and listed disorders omitted during routine diagnostic process e.g. anxiety disorders in schizophrenia.

## P06

Continuity of life: Development and evaluation of a novel psychiatric concept and instrument

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Over the years, the widely used concept of Quality of Life has got associated with many different meanings and thus became less

useful in psychiatric research and clinical practice. In an attempt to find an alternative that is more appropriate for people living with chronic and severe mental illness, we have developed a novel concept entitled 'Continuity of Life', which can be defined as the degree to which an event or process (such as mental illness) has interrupted the continuity of life of an individual person's life with regard to his/her activities, hopes and plans. The Continuity of Life concept focuses on the present state as well as on future expectations of the individual and covers the following life domains: personal mental and physical health; access to material possessions and earnings; relationships with family members and friends; work, studies, professional career; leisure and recreation; civic duties and responsibilities; and personal beliefs and/or religious faith. With this definition in mind, we have subsequently developed Continuity of Life Interview - a semi-structured instrument that is particularly sensitive to events such as admission to psychiatric hospital for a serious mental illness including schizophrenia, or the presence of obvious disability due to any cause. Psychometric properties of this instrument were evaluated in a psychiatric rehabilitation setting and the results demonstrated its appropriateness in assessing an individual's perception of psychotic illness-related disruption of relevant life areas and global life quality across the above-mentioned domains.

## P07

Adapting a generic PTSD and depression screening instrument to asylum seekers from diverse cultural backgrounds

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Trauma literature focusing on refugee populations indicates very high rates of both posttraumatic stress disorder (PTSD) and depression. Although individual reactions to traumatic events are similar across ethnic backgrounds, too often refugees solicit health care systems for psychosomatic symptoms without ever receiving a correct diagnosis. Moreover, few standardized psychiatric questionnaires created or adapted for refugees exist. Thus adapting a screening instrument to detect PTSD and depression among newly arrived asylum seekers from different countries seems necessary and appropriate in a public health setting. In such settings, with limited resources, screening instruments must be short and easily administered by different health professionals (i.e. nurses or general practitioners). Bearing this in mind, we chose as the basis for our screening instrument the PTSD and Major Depressive Episode sections of the Mini International Neuropsychiatric Interview (MINI), a semi-structured clinical interview utilising the DSM-IV diagnostic criteria, which is recognised internationally. The adaptation of these sections of the MINI was done in two steps. First a multidisciplinary team of health professionals attempted to reword the questions in order to take the context of newly arrived asylum seekers into account. Next, a sample of 14 interpreters, speaking 24 languages or dialects, experienced in working as cultural mediators, was asked to comment upon each questionnaire item (of the original French version, the English version of the MINI and the adapted French version), as well as the DSM-IV diagnostic criteria. Thus a new version of the MINI PTSD and Major Depressive Episode for asylum seekers was created.

**P08**

## Family assessment with the Familiogram

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In the field of family assessment there's a lack of adequate instruments that permit to evaluate a network of family relationships. The objective of this paper is to report on the development of such an assessment tool called 'Familiogram' which is based on Morenos's Sociogram and modern network approaches from sociology. Family members have to rate subsequently how close the relations between each dyad from his/her family seem to them. Cohesion as one of the main dimension of family networks is measured by the standardized density of each dyad. With the dichotomization of the values a graph is created that represents the cohesion patterns in a given family. The Familiogram was applied to 21 inpatients (age 7-13) with different diagnosis from the Department of Child Psychiatry at the University of Zurich, as well as to a control group (no sex and age differences). The children from both groups showed similar patterns in their family structure representing a stronger cohesion with the father and mother in comparison to the average siblings dyad (relationship effects). It was not found any difference between clinical and non-clinical children (group effect). The evaluation of family relations with the aid of the Familiogram showed several advantages for clinical and research purposes. It yields results from the different perspectives of family members since it's applicable also to kids. The Familiogram permits to differentiate various family dimensions, and it produces a graph that is useful in the interpretation of the family network in clinical or research context.

**P09**

## Aggression from patients: Nurse questionnaire survey

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**Objectives:** To determine the nature, frequency and sequelae of aggressive acts from patients towards nursing staff working in psychiatric services in comparison to other medical facilities in Poland. Test battery (Stress at Work Scale, General Health Questionnaire-28, Maslach Burnout Inventory, Work Satisfaction Scale), was distributed among psychiatric (PNs; n=78) and non-psychiatric nurses (N-PNs; n=335) registered in the District Chamber of Nurses and Midwives, Lodz, Poland. Number of sick-leave days (absenteeism) was administered.

**Results:** High response rate, 92,6% was achieved. PNs were exposed much more often to patients' violent behavior (both psychological and physical aggression) than N-PNs. Verbal aggression were experienced by all PNs and nine of ten N-PNs, physical attack - by 4/5 of PNs and 1/5 of N-PNs during last year of work. Further analysis on frequency revealed differences. Nevertheless, level of experienced violence in both psychiatric and non-psychiatric groups was high. The higher aggression experienced the lower work satisfaction, higher emotional exhaustion and depersonalization in both groups and additionally lower subjective assessment of well-being and personal accomplishment in N-PNs. We found strong correlation between aggressive behavior and mental health status in N-PNs but not in PNs. Absenteeism at work were low and not correlated with violence experienced.

**Conclusion:** The study highlights the problem of workplace violence against nurses and shows the extent of the phenomenon. Consequently, there is a strong need to provide staff from all specialties with education and support in order to deal with this issue and minimize the impact of increasing levels of workplace aggression.

**Poster Session 2: Bipolar Disorder****P10**

## Alpha-thalassemias and bipolar disorder: A case report

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After having discussed a possible association between beta-thalassemias and bipolar disorder (1), at present we wonder about a possible association between alpha-thalassemia and bipolar disorder. We report the case of a 38 year old woman with bipolar disorder and alpha-thalassemia. The patient, a native of Reunion Island, has familiar history of bipolar disorder (both parents, two brothers, a paternal uncle). Some genetic studies have described the existence of a possible genetic susceptibility for bipolar disorder on the short arm of chromosome 16, close to the gene involved in certain alpha-thalassemias. Taking into account the methodological difficulties due to the clinical and probably genetical heterogeneity of bipolar disorder, we suggest that linkage techniques should be used. Thus a known genetic disease (alpha-thalassemia) could contribute to confirm the presence on the short arm of chromosome 16 of a factor of genetic susceptibility for bipolar disorder. Linkage studies should be performed in families with strong association between both diseases. (1) Di Clemente T, Damsa C, Di Piazza G, Groff P, Chauvet I, Pull C, Andreoli A: Beta-thalassemias and bipolar disorder. *Annales Médico-Psychologiques*, 2004 in press.

**Acknowledgements:** This work was realized due to the participation of Dr Anne Schartz.

**P11**

## Dimensional complexity of electroencephalography signal increases during the manic episode of Bipolar Mood Disorder Type I

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Quantitative electroencephalography methods like non linear analysis of time series have been used in last decade for cerebral disease to find a new way for the diagnosis of pathologies in brain. Fractal dimension may reflect the number of independently oscillating neuronal cell assemblies that contribute to the signal and its calculation indicates the complexity of neuronal dynamics. We computed EEG fractal dimension by Hausdorff algorithm to EEGs obtained from 29 cases of BMD type I who were experiencing a manic episode and compared them to 17 normal subjects. Mean fractal dimension was significantly higher in patients with an incremental trend towards the right hemisphere. We conclude that our findings are indicative of increased asynchronous neuronal activity in mul-

tiple cell assemblies predominantly located in the right hemisphere during the manic episode of BMD I. This conclusion could encompass clinical features of the manic episode.

## P12

Biopterin and amino acids in bipolar mania

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Biopterin is an essential co-factor for the hydroxylation of tryptophan, phenylalanine and tyrosine and is therefore hypothesized to play a pivotal role in the pathogenesis of affective disorders. Previously we reported on decreased levels of biopterin in depressed patients. In this study we explore the role of biopterin and its relation to several amino acids in manic symptomatology. Venous blood was drawn from 14 bipolar patients in the manic state and after remission. Biopterin and large neutral amino acids were measured in plasma with high pressure liquid chromatography. Biochemical parameters of patients in the manic state were compared with values when they were in remission and with those of 32 healthy controls. As compared to healthy controls, mean biopterin level was higher in manic patients (6.9 vs. 8.6 nmol/l,  $p=0.03$ ) and remained increased after remission of manic symptoms. Phenylalanine concentration was decreased in symptomatic patients and increased significantly after remission ( $p=0.04$ ). Manic bipolar patients showed high levels of biopterin, opposite to our earlier findings in depressed patients, who had decreased biopterin levels. We hypothesize that activation of biopterin stimulates hydroxylation of phenylalanine, which could lead to increased synthesis of catecholamines and thus to manic symptomatology. After remission we found increased phenylalanine concentrations suggesting down-regulation of this system.

## P13

Comorbidity and chronology of social anxiety disorder in patients with severe bipolar spectrum disorders

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**Objective:** The authors investigated frequency, clinical correlates and chronology of social anxiety disorder comorbidity in a cohort of patients with severe bipolar spectrum disorders.

**Method:** Subjects were 189 consecutively hospitalized adult patients with a diagnosis of bipolar I disorder ( $n=166$ ) or schizoaffective disorder, bipolar type ( $n=23$ ). Principal diagnosis and comorbidity were assessed by the Structured Clinical Interview for DSM-III-R - Patient Version.

**Results:** Overall, 24 (12.7%) patients also met DSM-III-R criteria for lifetime social anxiety disorder and 19 (10.1%) for current social anxiety disorder. Significantly more patients with comorbid social anxiety disorder also had substance use disorders (37.5%) compared to those without comorbid social anxiety (17.8%) ( $p<.05$ ). Linear regression showed that lifetime social anxiety comorbidity was significantly associated with an earlier age at onset of syndromal bipolar disorder and more severe episodes over time. Patients with social anxiety comorbidity reported more frequently

separation anxiety symptoms during their childhood than those without comorbid social anxiety.

**Conclusions:** Comorbid social anxiety disorder is not rare among bipolar disorder patients. Onset of social anxiety is likely to precede onset of full-fledged bipolar illness in the majority of individuals with the two comorbid disorders. Further heuristic and clinical research into comorbidity between social anxiety and bipolar disorder is important and warranted.

## P14

Validation of the French version of the Mood Disorder Questionnaire (MDQ)

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Bipolar disorder is a serious and recurrent illness, with a high risk of chronicity, premature death or disability. Mainly because of the wide range of symptoms presented and of their frequent attribution to problems other than bipolar disorder, this illness is often unrecognized, resulting in substantial delays, both in diagnosis and in appropriate treatment. According to 2 surveys conducted by the National Depressive and Manic-Depressive Association on bipolar members, over one-third among them waited 10 years or more before receiving the appropriate diagnosis and 60% were misdiagnosed as suffering from depression. To address the crucial issue of timely and accurately recognizing bipolar spectrum disorders, a screening instrument, the MDQ, was developed. Recently validated, both in a clinical and in a general population, it shows very high specificity, which means that the MDQ will screen out effectively nearly all true negatives. In the clinical sample, the MDQ shows a good sensitivity (identifies 7 out of 10 positive cases) whereas in the general population, its sensitivity drops (only 3 out of 10 successfully screened out). Working in an evaluation and treatment program for bipolar disorders at the Psychiatric Department of Geneva University Hospital, we are very much concerned with the need to improve the recognition and subsequently the treatment, of this illness. For this reason, we decided to translate and validate this French version of the MDQ. Preliminary findings will be presented and discussed.

## P15

A group intervention focusing on cannabis use among patients with bipolar disorders

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Cannabis has commonly been regarded as an innocuous drug. But more recently, growing evidence highlights that cannabis can and does produce dependence and that its use may be detrimental, particularly for vulnerable populations such as adolescents and persons with somatic or psychiatric pathology. Although more attention is now being directed toward the need to develop treatment protocols for cannabis consumers, this need remains mainly unmet. Clear data is lacking regarding specific associations between psychiatric disorder and cannabis dependence. According to several studies, the presence of a psychiatric disorder increases the likelihood of developing alcohol and drugs dependence. On the other

hand, as shown in some researches, substance abuse/dependence may have direct (initiation and aggravation) and indirect effects (treatment compliance) on the mental illness. Concerning bipolar disorders, high rates of substance misuse are reported. In fact, when compared to bipolar illness, no other Axis I disorder shows as high a prevalence of substance abuse. The reasons for this strong association are unknown. Moreover, bipolar patients seem to present some patterns of drug use, with high rates of cannabis and stimulants. Aware of these patterns and concerned with the problematic issue of substance abuse adverse effects on mental illness, we recently developed a group treatment protocol focusing on cannabis use among patients consulting in our evaluation and treatment program for bipolar disorders. We will briefly describe our treatment module, based on education, motivational interviewing and cannabis consumption daily record. Preliminary findings concerning the clinical feasibility of this group intervention will be reported.

### P16

Gabapentin as add-on therapy in bipolar spectrum disorders

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Many anticonvulsants are investigated as possible mood stabilizers. Gabapentin was approved for the adjunctive treatment of complex partial seizures. Case observations about effect on mood prompted further exploration of antidepressant effects of this compound. Although controlled trials failed to support either the antimanic or the antidepressant efficacy, other studies in bipolar disorder showed anxiolytic and antidepressant effects. The present study was designed to investigate the efficacy and tolerability in a group of partially therapy-resistant patients with bipolar spectrum disorders in a depressive episode. The study included 16 patients (13 female; mean age: 45 years). All used Lithium in an adequate dose and 6 also valproic acid and 4 clonazepam. Antidepressants or antipsychotics were used each in 50%. Gabapentin was started in a daily dose of 400mg and in 3 days increased to 1200mg. After 4 weeks the dose was adjusted individually and subsequently kept unchanged for another 5 months. Mean daily dose at endpoint was 2375mg. At 2400mg daily, the mean plasma concentration was 4.2mg/l. The effect of treatment was assessed at baseline and at monthly intervals with the PANSS, CGI and MADRS for 6 months. There was a marked decrease from baseline to endpoint on the MADRS mean total score of more than 40%. The CGI paralleled this decrease. No major side effects were reported except for sedation in some patients. It is concluded that adjuvant therapy of gabapentine may be effective in patients with bipolar spectrum disorder and prominent depressive symptoms.

### P17

Clinical characteristics and current treatment of patients with bipolar disorder in a Russian psychiatric hospital

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The aim of this study was to evaluate the demography, illness characteristics and current in-patient treatment of patients suffering

from bipolar disorder in Russia. The method was a retrospective analysis of the medical records of all patients hospitalised for bipolar disorder in Saint Petersburg psychiatric hospital during the two years 1999-2000 (n = 120). The mean age was 45 years and the mean age of onset was 27 years. The first episode was associated with a traumatic life event in 41% of the patients. The first episode was a mania in more (54%) than half of the subjects. The mean time spent in acute episodes between onset and the first hospitalisation was 3.6 years without gender difference. The patients had been hospitalised in 69% of all experienced episodes. Patients who were hospitalised twice during the study period had more severe illness characteristics at the index hospitalisation. Manic episodes were treated with mood stabilizers in 80%, and with antipsychotics in 99% of the cases. Depressive episodes were treated with mood stabilizers in 18%, antidepressants in 82%, and antipsychotics in 68% of the cases. Multiple class medication was the rule in both phases. ECT was never used. The prescribed maintenance treatment was to a large extent the same as the acute treatment. The results of the study suggest that the treatment of bipolar disorder in Russia adheres basically to what is recommended in the international literature. There is a room, however, for improvement regarding the rational use of medications and ECT.

### P18

What kind of treatments does a specialised programme for bipolar disorders offer to patients?

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Bipolar disorder causes functional impairment, long-lasting distress and morbidity that interfere significantly with patients' lives. Furthermore, bipolar disorder has a high level of mortality. Timely diagnosis and intervention with the appropriate treatment can reduce suicide risk, alcohol/substance abuse, social and occupational impairment, and prevent episodes becoming more frequent and difficult to treat. The specialized outpatient bipolar program in Geneva was developed to offer the highest standard of care for people suffering from bipolar disorder. This program is based on a multidisciplinary approach, using individual and group therapy. Psychoeducation for patients and their families is the cornerstone of our program and for the patients themselves, Bauer and McBride's life goal program has been applied for several years with success. A specific group approach for bipolar patients with cannabis dependence has also been implemented recently. The different aspects and specificities of our program will be described in our presentation.

### P19

Aripiprazole versus placebo in the treatment of acute mania

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This study assessed the efficacy and safety of aripiprazole in comparison with placebo for patients with acute bipolar mania (Keck et

al., 2003). A multicentre, double-blind, randomised, placebo-controlled study was conducted in 262 patients with acute mania. Patients received either aripiprazole 30 mg (reduced to 15 mg if necessary) or placebo for 3 weeks and remained hospitalised for a minimum of 2 weeks of the treatment phase. The primary measure of efficacy was the change in Y-MRS Total score. Response was defined as a decrease of 50% in Y-MRS Total score. Aripiprazole produced statistically significant improvements in Y-MRS Total score compared to placebo (8.15 vs. 3.35,  $p < 0.01$ ). In addition, the response rate was significantly higher in the aripiprazole group compared to the placebo group (40% vs 19%,  $p < 0.01$ ). For all efficacy variables, aripiprazole separated from placebo by Day 4. Discontinuations due to adverse events did not differ between the aripiprazole and placebo groups, and there were no significant changes in body weight compared to placebo. Aripiprazole was shown to be effective and well tolerated in the treatment of acute mania in patients with bipolar disorder.

## P20

Aripiprazole in acute mania: Results from a second placebo-controlled study

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The efficacy and safety of aripiprazole was compared with placebo in bipolar I patients experiencing an acute manic or mixed episode. A phase III, multicentre, double-blind, placebo-controlled study randomised 272 bipolar I patients with acute mania to aripiprazole 30 mg (which could be reduced to 15 mg for tolerability) or placebo for 3 weeks. Patients remained hospitalised for a minimum of 2 weeks of the 3-week double-blind treatment phase. Aripiprazole produced statistically significant improvements in Y-MRS Total score at endpoint compared with placebo (12.5 vs 7.2,  $p < 0.01$ ). A statistically significant difference from placebo on the Y-MRS Total score was observed by Day 4. In addition, the response rate was significantly higher in the aripiprazole group compared with the placebo group (53% vs 32%,  $p < 0.01$ ). The overall discontinuation rate due to adverse events was similar between the aripiprazole and placebo groups and there were no significant changes in body weight compared to placebo. This second double-blind placebo-controlled study demonstrates the efficacy and safety of aripiprazole in the treatment of acute mania in patients with bipolar I disorder.

## P21

Aripiprazole in the maintenance treatment of bipolar disorder

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This was a relapse prevention study to compare aripiprazole with placebo in the maintenance treatment of bipolar I disorder. In this 26-week, double-blind study, 161 patients diagnosed with bipolar I disorder were randomized to either aripiprazole or placebo. Patients had recently completed an aripiprazole acute mania study or had

recently experienced a manic episode, but had not participated in an aripiprazole acute mania study. Patients first entered a stabilization phase where they received open label aripiprazole, 30 mg/day with the option to reduce to 15 mg, for 6–18 weeks. After meeting stabilization criteria (Y-MRS 10 and MADRS 13 for 4 consecutive visits), patients were randomized into the double-blind maintenance phase. The primary endpoint of the study was time to relapse of manic, mixed or depressive symptoms. Patients were discontinued from the study due to lack of efficacy if they were hospitalized for manic or depressive symptoms, or if they required an addition to or increase in their psychotropic medications. Time to relapse of bipolar disorder symptoms was significantly longer with aripiprazole treatment than with placebo. Total number of patient relapses was significantly fewer in those patients treated with aripiprazole than in placebo-treated patients. Aripiprazole was superior to placebo in maintenance of response in patients with bipolar I disorder who had been stabilised on aripiprazole for 6–18 weeks following a manic episode.

## P22

Clinical predictors of response to olanzapine or olanzapine/fluoxetine combination for bipolar depression

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**Background:** Both olanzapine/fluoxetine combination (OFC) and olanzapine monotherapy have shown effectiveness in bipolar depression relative to placebo. However, the patient variables that may influence response to olanzapine monotherapy relative to olanzapine/fluoxetine combination therapy are unknown. The purpose of this analysis was to utilize a stepwise logistic regression model to identify predictors of response achieved with either olanzapine or OFC in a sample of bipolar depressed patients.

**Methods:** Stepwise logistic regression was performed on acute phase data from a double-blind, randomized trial comparing olanzapine monotherapy, placebo, and OFC for bipolar depression. Three regressions were run separately on olanzapine, placebo, and OFC subjects. Response was defined as  $\geq 50\%$  decrease in Montgomery-Åsberg Depression Rating Scale (MADRS) total score at the patient's last visit.

**Results:** For olanzapine monotherapy, a set of four independent variables was significant for predicting response: non-Caucasian race, absence of rapid cycling, duration of current episode less than 60 days, and one or more previous episodes of mania in the past 12 months (model  $X^2 = 30.18$ ,  $p < .001$ ). For placebo, four independent variables were significant for predicting response: non-Caucasian race, body mass index  $< 27$ , absence of melancholic features, and family history of bipolar disorder (model  $X^2 = 21.29$ ,  $p < .001$ ). For OFC, only one independent variable was significant for predicting response: onset of bipolar disorder before age 20 (model  $X^2 = 4.47$ ,  $p = .035$ ).

**Conclusion:** Response in a sample of bipolar depressed patients was predicted by different profiles of patient characteristics for olanzapine, OFC, and placebo.

**P23**

Improved cognitive outcome associated with olanzapine treatment in bipolar patients

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**Background:** Recent investigations have reported that patients with bipolar disorder display a range of cognitive deficits involving executive control, attention, memory and psychomotor speed with relative sparing of general intellectual functioning. Many of these patients demonstrate persistent cognitive deficits even with clinical improvement in affective symptoms. The current study examined changes in cognitive performance in a cohort of bipolar patients.

**Methods:** Patients experiencing an acute manic episode (N=142) were enrolled in a multi-site, double-blind, randomized clinical trial of either olanzapine or divalproex and were evaluated at baseline, 7 weeks, and 47 weeks of treatment. Typical clinical rating scales as well as a brief battery of neurocognitive measures were administered.

**Results:** Change scores from baseline to week 47 showed significant improvement for the olanzapine-treated group compared to the divalproex-treated group on the Young Mania Rating Scale total score ( $p=0.006$ ). Cognitive performance, as measured by change scores from baseline to week 47, showed significant improvement for the olanzapine-treated group compared to the divalproex-treated group for the Controlled Word Association Test ( $p=0.006$ ) and number of perseverative errors on the Wisconsin Card Sorting Test ( $p=0.046$ ).

**Conclusion:** Improvement on these two neurocognitive measures suggests an increased ability to maintain mental set and generate appropriate responses. Results are consistent with reports of patients with schizophrenia who show improvement in cognitive performance following treatment with atypical antipsychotic medication. These findings indicate that long-term treatment with olanzapine is associated with better cognitive performance in patients with bipolar disorder, specifically those experiencing a manic episode.

**P24**

Olanzapine versus placebo in the prevention of relapse for mixed index versus manic index episode patients

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**Objective:** Type of index episode may differentially affect long-term outcome for bipolar patients. The following post-hoc analyses looked at patterns of relapse for mixed vs. manic index episode patients receiving olanzapine or placebo.

**Methods:** Bipolar patients who achieved remission (YMRS =12 and HAMD-21 =8) following 6-12 weeks of open-label olanzapine (5-20 mg/day) were randomly assigned to double-blind treatment with olanzapine (5-20 mg/day, mixed index n=76, manic index

n=144) or placebo (mixed index n=45, manic index n=88) for up to 48 weeks. Relapse was defined as a YMRS =15 or HAMD-21 =15 or hospitalization.

**Results:** For patients entering with a mixed episode, olanzapine treatment was associated with lower rates of relapse (59.2% vs. 91.1% for placebo patients,  $p<0.001$ ) and a longer median estimated time to relapse (46 days vs. 15 days for placebo patients;  $p<0.001$ ). For patients entering with a manic episode, olanzapine was again associated with lower rates of relapse (39.6% vs. 73.9% for placebo,  $p<0.001$ ) and longer time to relapse (median not estimable vs. 43 days for placebo patients,  $p<0.001$ ). Separate analyses examining specific types of relapse revealed that mixed index episode patients receiving olanzapine had significantly longer times to manic ( $p<0.001$ ) and depressed ( $p=0.001$ ) but not mixed relapse ( $p=0.485$ ), while manic index episode patients receiving olanzapine had significantly longer times to manic ( $p<0.001$ ), depressed ( $p=0.002$ ), and mixed relapse ( $p<0.001$ ).

**Conclusion:** Olanzapine was associated with reductions in overall relapse rates and longer time spent free from any relapse for both manic and mixed index episode patients.

**P25**

Long-term use of olanzapine or olanzapine/fluoxetine for bipolar depression

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**Purpose:** Olanzapine/fluoxetine combination (OFC) has shown efficacy in treating bipolar depression. The present analyses examined 6-month maintenance data for subjects who achieved remission of depressive symptoms following acute treatment.

**Methods:** 379 subjects with bipolar depression completed 8-weeks of randomized, double-blind treatment using olanzapine (OLZ, n=179), placebo (n=145), or OFC (n=55). Of these, 192 were in remission (MADRS = 12) upon entering open-label treatment, at which time they were switched from their acute-phase treatment to 5-20mg/day open-label OLZ. After 1 week on OLZ, subjects could be switched to OFC as needed. Primary efficacy measure was the Montgomery-Åsberg Depression Rating Scale (MADRS). Manic symptoms were monitored using the Young Mania Rating Scale (YMRS). Time to relapse (MADRS >15) was estimated using Kaplan-Meier survival analysis.

**Results:** Of the 192 remitters, 120 (62.5%) remained free from relapse over the 6-month open-label period. For the 72 subjects (37.5%) who relapsed, median time to relapse was 194 days. Mean MADRS total score at open-label endpoint was 7.93 (SD 9.24, n=192) using a last-observation-carried-forward (LOCF) methodology.

**Conclusion:** This open-label study suggests that OLZ and OFC may represent treatment options in the long-term management of bipolar depression. Further studies are necessary to replicate these findings using appropriate controls and double-blind methodology.

**P26**

Efficacy and tolerability of Quetiapine compared with Olanzapine for inpatients with acute mania

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**Background:** Data from double-blind, randomized, controlled trials are suggesting that new generation of antipsychotics constitutes a viable alternative treatment for mood disorders. However there are few reports regarding the use of quetiapine in such patients. The risperidone, quetiapine, ziprasidone and aripiprazole producers are expected to seek FDA approval for use of this drug to treat acute mania.

**Objective:** Efficacy and tolerability of quetiapine versus olanzapine in adult inpatient with bipolar acute mania.

**Methods:** In a 6-month, open-label trial 48 adult inpatients with mania bipolar I disorders (DSM-IV TR, confirmed by Structured Clinical Interview for DSM-IV Axis I disorders) were randomized in a 2:1 ratio (olanzapine/quetiapine), treatment being adjusted according to individual response. Efficacy was assessed with YMRS (score and response rate), PANSS, CGI-S, CGI-I, GAF. Response was defined a priori as at least a 50% improvement from baseline and remission as a score of = 12 at the end of the trial.

**Results:** 13 of 16 patients (81,25%) randomized to quetiapine completed the study compared with 25 (78,12%) of 32 patients randomized to olanzapine. No significant difference between groups was found for any efficacy variable. The medium dose of quetiapine was 500 mg/day and of olanzapine was 15 mg/day. However a significantly higher percentage of olanzapine treated patients required adjuvant medication for EPS or had extrapyramidal symptoms (EPS).

**Conclusion:** Quetiapine and olanzapine proved similar efficacy in the treatment of bipolar mania, quetiapine producing less EPS than olanzapine.

**P27**

Quetiapine adjunctive therapy for mania associated with bipolar disorder

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**Objective:** Evaluate quetiapine (QTP) in combination with lithium (Li) or divalproex (DVP) for the treatment of mania.

**Methods:** Subjects with bipolar I mania were randomized to 21 days' double-blind treatment with: QTP (flexibly dosed up to 800 mg/d) plus Li or DVP (target trough serum concentrations 0.7–1.0 mEq/L and 50–100 mg/mL, respectively); or placebo (PBO) plus Li/DVP.

**Results:** 56/91 (61.5%) QTP+Li/DVP-treated patients completed the study, compared to 49/100 (49.0%) in the PBO+Li/DVP group. By Day 21 QTP+Li/DVP-treated patients had a significantly greater reduction in Young Mania Rating Scale (YMRS) scores compared with the PBO+Li/DVP group (-13.76 vs -9.93; P=0.021). Significantly more quetiapine-treated patients (54.3%) achieved a YMRS response at Day 21 than Li/DVP-treated patients (32.6%) (P=0.005). Mean last-week quetiapine dose in responders was 584

mg/d. Common adverse events (<sup>3</sup>10%) included somnolence, headache, dry mouth, asthenia, postural hypotension, and dizziness. Discontinuation due to adverse events was similar in both groups.

**Conclusions:** Quetiapine in combination with lithium or divalproex is well tolerated and has superior efficacy in mania compared to lithium or divalproex alone.

**P28**

Quetiapine monotherapy for mania associated with bipolar disorder

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**Objective:** Evaluate efficacy and safety of quetiapine monotherapy for mania associated with bipolar disorder.

**Methods:** Patients (bipolar I disorder, manic episode) were randomized to 12 weeks' double-blind treatment with quetiapine (QTP) (up to 800 mg/d), placebo (PBO), or an internal standard (haloperidol [HAL]). The primary endpoint was change from baseline in Young Mania Rating Scale (YMRS) score at Day 21 (QTP vs PBO).

**Results:** 53.9% (55/102) of QTP- vs 41.6% (42/101) of PBO-treated patients completed the study. Quetiapine-treated patients had a significant improvement in YMRS score vs PBO at Day 21 (-12.29 vs -8.32; P=0.0096), that increased by Day 84 (P<0.0001). Significantly more QTP patients achieved a YMRS response (<sup>3</sup>50% decrease from baseline) at Day 84 (QTP 61.4%; PBO 39.0%; P=0.0015). Significant improvements in YMRS score at Days 21 and 84 for HAL were also observed. Extrapyramidal symptoms (EPS) were consistently higher in the HAL group (any EPS event: HAL 60.6%; QTP 12.7%; PBO 16.8%), as were discontinuations due to adverse events (HAL 10.1%; QTP 4.9%; PBO 5.9%). Mean last-week QTP dose in responders at Day 21 was 559 mg/d.

**Conclusions:** Quetiapine monotherapy is well tolerated and significantly more effective than placebo in the treatment of mania associated with bipolar disorder.

**P29**

Randomised, double-blind, controlled data on the treatment of mania with quetiapine

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**Objective:** Evaluate the atypical antipsychotic quetiapine for the treatment of mania associated with bipolar disorder in a large cohort of patients.

**Methods:** Patients (N=604) with bipolar mania were treated with quetiapine (up to 800 mg/d), placebo, or an internal control (lithium or haloperidol) for 84 days. Outcomes were compared on several efficacy and safety endpoints.

**Results:** 60.8% (127/209) of quetiapine-treated vs 38.9% (77/198) of placebo-treated patients completed the study. The mean last-week quetiapine dose in responders at Day 21 was 575 mg/d. A significant improvement on the Young Mania Rating Scale (YMRS) was observed with quetiapine as early as Day 4 (P=0.021) and remained significant to Day 84 (P<0.001). At the primary endpoint (Day 21), improvement on the YMRS was -13.58 for quetiapine vs -7.76 for placebo (P<0.001). Patients improved significantly in the lithium and haloperidol groups. Common adverse events (<sup>3</sup>10%) in the quetiapine group were somnolence, dry mouth, and insomnia



(insomnia was reported at a similar rate in all groups). Tremor was common in the haloperidol and lithium groups. Akathisia and extrapyramidal syndrome were common in the haloperidol group.

**Conclusion:** Quetiapine monotherapy is effective, fast-acting, and well tolerated when used for the treatment of mania associated with bipolar disorder.

### P30

Quetiapine monotherapy for the treatment of mania in bipolar disorder: A randomised controlled trial

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**Objective:** Evaluate the efficacy and safety of quetiapine monotherapy for mania associated with bipolar disorder.

**Methods:** 302 patients (bipolar I disorder, manic episode) were randomized to 12 weeks' double-blind treatment with quetiapine (QTP) (flexibly dosed up to 800 mg/d), placebo (PBO), or lithium (Li) (0.6–1.4 mEq/L).

**Results:** 67.3% (72/107) of QTP-treated, 36.1% (35/97) PBO-treated and 68.4% (67/98) Li-treated patients completed the trial. Quetiapine-treated patients had a significantly greater reduction in mean Young Mania Rating Scale (YMRS) scores vs. PBO at Day 21 (-14.62 vs. -6.71;  $P < 0.0001$ ) and Day 84 ( $P < 0.0001$ ). Significantly more QTP patients achieved a response ( $\geq 50\%$  decrease from baseline YMRS score) at Day 21 (QTP 53.3%; PBO 27.4%;  $P = 0.0002$ ) and Day 84 (QTP 72%; PBO 41.1%;  $P < 0.0001$ ). Quetiapine and Li were similar in all efficacy measures vs. PBO. Most common adverse events ( $\geq 10\%$ ) in QTP-treated patients included dry mouth and somnolence. Lithium was associated with tremor. Mean last-week QTP dose in responders at Day 21 was 586 mg/d.

**Conclusions:** In mania, quetiapine monotherapy is well tolerated and significantly more effective than placebo.

## Poster Session 2: Depressive Disorders

### P31

Serum dehydroepiandrosterone sulfate and cortisol measurements in patients with depression

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We investigated the association between cortisol, dehydroepiandrosterone sulfate (DHEAS), one of neurosteroid, and depression. DHEAS is an important circulating neurosteroid with several vital neurophysiological functions, including the regulation of neuronal excitability and function. Some researchers suppose that cortisol/DHEAS ratio is very important for an estimate of heaviness of depression. The aim of this study was to investigate cortisol and DHEAS level and their ratio of the patients with depression.

**Methods:** There were examined 32 patients with diagnosis depressive episode (DE,  $n = 11$ ) and recurrent depressive disorder (RDD,  $n = 22$ ). Blood samples for DHEAS and cortisol measurement were drawn before antidepressant treatment.

**Results:** The patients with recurrent depressive disorder had shown significant decrease ( $1.29 \pm 0.2$  mkg/ml) of DHEAS level in comparison with the patients with depressive episode ( $1.97 \pm 0.25$

mkg/ml,  $p < 0.05$ ). Not any differences in cortisol level were evaluated between groups with DE and RDD. The patients in both groups had shown the increase of cortisol level ( $610 \pm 130$  nmol/ml) in comparison with normal data ( $318 \pm 85$  nmol/ml,  $p < 0.05$ ). The ratio of cortisol/DHEAS in group with RDD was significantly higher ( $421 \pm 97$ ), than in group with DE ( $309 \pm 69$ ,  $p < 0.05$ ).

**Conclusions:** Our research shows that patients with recurrent depressive disorder have level of DHEAS less than patients with depressive episodes. It may be connected with duration and heaviness of depression.

### P32

Cortisol responses to combined Dexamethasone/CRH test in outpatients with a major depressive episode

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**Objective:** The DEX/CRH test is now a well-established method to test the hypothalamic-pituitary-adrenal (HPA) axis for depressed patients in an inpatient setting. The aim of this study was to evaluate this test in an ambulatory population suffering from major depression compared to a healthy control group.

**Methods:** We recruited 36 patients (15 men, 21 women) with a major depressive episode according to the DSM IV. The mean age was 35.8 (SD  $\pm$  11.5), and each patient's episode was of severe intensity with a median value of 32 on the MADRS scale. In parallel we recruited 20 controls (13 men, 7 women). The mean age was 32.8 (SD  $\pm$  11.6).

**Results:** The main result is a statistically significant difference concerning the delta value for cortisol plasma value on the DEX/CRH test for depressed patients with two previous episodes compared to healthy controls ( $p = 0.0032$ ). On the contrary, the difference was not statistically significant for patients with only one or no previous episodes.

**Conclusions:** In future studies, it could be interesting to use this test more specifically by dividing ambulatory patients into subgroups according to their past depressive history. It could also be interesting to measure the ACTH level.

### P33

Normalisation of serum BDNF in remitted patients after a major depressive episode

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**Objective:** We previously reported that serum BDNF is decreased in depressed patients. In the present study, we tested the hypothesis that antidepressant treatment normalize BDNF serum levels.

**Methods:** Major depressed patients (15 F and 11 M) diagnosed according to DSM IV criteria and healthy controls (13 F and 13 M) participated in this study. Serum BDNF was assayed with the ELISA method for depressed and remitted patients and the severity of depression was evaluated with the Montgomery-Asberg Depression Rating Scale (MADRS).

**Results:** A variance analysis showed that treatment had an effect ( $F(1,24)=4.46$ ,  $p=.045$ ) on the normalization of BDNF serum levels. We also found a correlation between the severity of depression ( $r=.51$ ,  $P=0.008$ ), the pre-treatment BDNF levels ( $r=.62$ ,  $P=0.001$ ) and the difference in BDNF serum levels after antidepressant treatment.

**Conclusions:** These results suggest that antidepressant treatment has a positive effect on BDNF serum levels and support the hypothesis of neurotrophic factor involvement in affective disorders.

### P34

Serum dehydroepiandrosterone sulfate and cortisol levels in patients with depression of differing severity

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DHEAS is an important circulating neurosteroid with several vital neurophysiological functions, including the regulation of neuronal excitability. Some researchers suppose that cortisol/DHEAS can serve as a measure for the evaluation of the severity of depression. The aim of this study was to investigate cortisol and DHEAS levels and their ratio in patients with depression.

**Methods:** We examined 32 patients with diagnosis depressive episode (F32.1-2, DE,  $n=11$ ) and recurrent depressive disorder (F33.2-3, RDD,  $n=21$ ). Serum DHEAS and cortisol levels were measured using ELISA method before antidepressant treatment.

**Results:** In patients with recurrent depressive disorder DHEAS level ( $1,29\pm 0,2$  mkg/ml) was significantly lower ( $p<0,05$ ) as than in patients with depressive episode ( $1,97\pm 0,25$  mkg/ml). In all investigated patients cortisol level ( $610\pm 130$  nmol/ml) was twice higher ( $p<0,05$ ) as the values in normal subjects ( $318\pm 85$  nmol/ml). There were no differences in cortisol level between patients with DE and RDD. Cortisol/DHEAS ratio in group with RDD was significantly higher ( $421\pm 97$ ,  $p<0,05$ ), than in group with DE ( $309\pm 69$ ).

**Conclusions:** Our research shows that cortisol/DHEAS can serve as a measure for the evaluation of the severity and duration of depression.

### P35

Assessing autobiographical memory in patients with major depressive disorders

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**Background:** Patients suffering from major depressive disorders (MDD) of acute severity exhibit memory deficits, which mostly affect explicit memory. Autobiographical memory (ABM), a component of episodic memory, has been studied in recent literature. However, the measuring tools used in the latest studies lacked specificity and did not allow to measure the emotional contents of memories.

**Aim:** Our study aimed first at measuring both ABM using the Della Sala questionnaire and the emotional contents of memories and second, at measuring the antidepressant efficacy of venlafaxine compared with clomipramine.

**Method:** A group of 31 depressed patients ( $HDRS > 25$ ) was included in the study allowing to compare 16 patients receiving

venlafaxine (150 mg/day) with 15 patients receiving clomipramine (150 mg/day). Four measures were made (baseline, D4, D32, D74).

**Results:** The results show that ABM performance is significantly diminished in patients receiving clomipramine ( $22,5 \pm 1,4$ ) compared with patients receiving venlafaxine ( $22 \pm 1,4$ ). ABM performance gain between D4 and D32 was significantly higher for the venlafaxine treated patients compared with clomipramine treated patients. There was a significant time treatment interaction [ $p = 0,003$  in the venlafaxine group (Bonfarroni)] compared with the clomipramine group ( $p = 1,00$ ). The same results were measured between D4 and D74 ( $p = 0,005$ , Bonfarroni).

**Conclusion:** ABM was much more significantly improved among patients treated with venlafaxine than among patients treated with clomipramine.

### P36

Mixed anxiety and depressive disorder in a primary care setting: Incidence and utilisation of health care resources

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**Introduction:** Determine the incidence of mixed anxiety and depressive disorder (MAD) and compare utilization of health care resources among primary care patients with MAD, patients with other psychiatric disorders and patients without psychiatric morbidity.

**Methods:** 223 consecutive patients aged 18 to 65 without known psychiatric illness were interviewed by a general practitioner (GP) using the Prime-MD questionnaire and DSM-IV diagnostic criteria for MAD. Demographic data, somatic complaints, number of visits during the last year to the GP, and physical illness were also collected.

**Results:** In 136 (60,1%) patients no psychiatric disorder was detected. 35 patients had a generalized anxiety disorder (15,2%; IC 95% 11,7-18,7), 32 had a major depressive disorder (13,9%; IC 95% 10,4-17,5) and 18 patients fulfilled diagnostic criteria for MAD (7,8%; IC 95% 4,3-11,3). 50 patients (22,4%; IC 95% 18,9-25,9) suffered some anxiety disorder (generalized anxiety disorder, panic disorder or anxiety disorder not otherwise specified); 40 patients (17,9%; IC 95% 14,4-21,4) suffered some depressive disorder (major depressive disorder, dysthymic disorder or minor depressive disorder), and 30 patients (13,4%; IC 95% 9,9-16,9) suffered a comorbid affective and anxiety disorder. Patients with MAD had a higher utilization of health care resources than patients without psychiatric morbidity, but lower utilization than patients with comorbid conditions ( $p<0,05$ ).

**Conclusions:** It's well known that the co-occurrence of affective and anxiety conditions are common among primary care attendees. Patients with MAD represent an important group with a less severe form of anxiety and depressive symptoms but with higher utilization of health care resources than patients without psychiatric morbidity.

### P37

Validation of the Edinburgh postnatal depression scale (EPDS) for detection of postpartum psychiatric morbidity in Spanish mothers

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**Objective:** to validate the Edinburgh Postnatal Depression Scale (EPDS) according to DSM-IV, for detection of psychiatric morbidity at six weeks postpartum.

**Method:** A two-phase study was conducted in the population of women attended at the Obstetric Ward for postpartum check-up over one year. In the first phase, 1453 women completed the EPDS and a sociodemographic questionnaire. During the second phase, a stratified randomized sample (N=404) according to EPDS score and working status during pregnancy, was administered the Structured Clinical Interview for DSM-IV (SCID) in order to establish Axis-I psychiatric diagnosis. Reverse weighting was used to calculate sensitivity and specificity. Receiver Operating Characteristic (ROC) curve was also constructed. Positive and negative predictive values were calculated for the optimal cut-off point. Stata Release 7.0 and SPSS 10.0 were used, with P=0.05 and a confidence interval of 95% (CI 95%).

**Results:** For the cut-off point of 7, sensitivity and specificity values were 88.2% (CI 95%: 73.2-95.3) and 84.0% (CI 95%: 80.2-87.4) respectively, and positive and negative predictive values were 55.4% and 96.9% respectively. For the cut-off point of 8, sensitivity and specificity values were 83.3% (CI 95%: 70.1-91.4) and 87.7% (CI 95%: 84.3-90.5) respectively, and positive and negative predictive values were 60.3% and 95.9% respectively. The area under curve ROC was 0.953 (CI 95%: 0.938-0.969).

**Conclusions:** The EPDS is a valid screening instrument for identifying cases of the most common postpartum psychiatric morbidity with an optimal cut-off point of 7/8.

### P38

Prevalence of postpartum psychiatric morbidity in Spanish mothers

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**Objective:** To assess psychiatric morbidity according to clinical diagnosis at six week postpartum.

**Method:** A two-phase study was conducted in the population of women attended at the Obstetric Ward for postpartum check-up over one year. In the first phase, 1453 women completed the Edinburgh Postnatal Depression Scale (EPDS) and a sociodemographic questionnaire. During the second phase, a stratified randomized sample (N=404) according to EPDS score and working status during pregnancy, was administered the Structured Clinical Interview for DSM-IV (SCID) in order to establish Axis-I psychiatric diagnosis. Prevalence rates were estimated using reverse weighting. Stata Release 7.0 and SPSS 10.0 were used, with P=0.05 and a confidence interval of 95% (CI 95%).

**Results:** In the second phase, 179 cases with psychiatric morbidity and 225 controls were identified according to SCID. The estimated psychiatric morbidity prevalence in the study population (n=1453) was of 18.3% (CI 95%: 15.0%-22.0%), with one or more psychiatric disorders at six week postpartum. Rates were 9.6% (CI

95% 7.6-12) for postpartum depression, 4.4% (CI 95% 3.0-6.3) for adaptive disorders, 4.2% (CI 95% 2.7-6.5) for anxiety disorders and 0.8% (CI 95% 0.4-1.5) for eating disorders.

**Conclusions:** Although depression is the most common postpartum psychiatric disorder, our results suggest that adaptive, anxiety and eating disorders are also present with a high prevalence in this period and therefore further research is required.

### P39

Depressive and anxiety disorders after childbirth

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Maternal anxiety and depressive disorders during the first years of baby life are associated with high risk of adverse effects on their mental functioning and psychosocial development. The study was carried out in the Institute of Pediatrics, Obstetrics and Gynecology for standardisation and validation of Russian version of Edinburgh Postnatal Depression Scale (Cox, 1987). This version was applied in Ukraine for the first time in the group of 153 women from three to six months after delivery and in control group of 54 women individually matched for age, marital status and number of children who were not pregnant and had no a baby in previous year. The results of validation and standardisation and the data regarding frequency and severity of postpartum depression have been assessed. In 17% of women after delivery (N=26) significantly high scores (12-19) according to the Edinburgh Scale were demonstrated. After screening procedure those women underwent investigation with the use of clinical psychiatric interview, based on the diagnostic criteria of ICD - 10 for depressive and anxiety disorders, Hamilton Depression Inventory and Spielberger State Trait Anxiety Scale. We observed that mixed anxiety-depressive states in our sample coexisted and had large overlap between panic disorder, generalized anxiety disorder, agoraphobia, and depression. In 17 cases depressive and anxiety disorders interfere with maternal functioning of the women and disturbed mother child relations. Further research will be directed on studying of the effectiveness of psychotherapy for the women suffering from depressive and anxiety disorders during the first years of their motherhood.

### P40

Social situation and social network of seasonal affective disorder (SAD) patients in comparison with suicide attempters with non-seasonal major depression

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**Objectives:** To study the social situation and the social network of SAD out-patients (n=20) in comparison with age and gender matched in-patients with non-seasonal major depression (MDD) and with a recent suicide attempt (SA).

**Methods:** Information about the clinical background and socio-demographic factors was obtained by semi-structured interviews.

The Montgomery-Asberg Depression Rating Scale (MADRS) measured the severity of the depression and The Interview Schedule assessed the social networks for Social Interaction (ISSI) in both groups.

**Results:** No significant differences were found between the SAD and the SA groups regarding the socio-demographic factors, i.e. marital status, total number of children younger than 18, educational level, vocational, housing and economical status, and most of the clinical background factors i.e. family history of mood/substance use disorder, early separation from at least one parent, traumatic experiences, age at the onset of the psychiatric illness, previous psychiatric out-patient treatment, any concomitant personality/substance use disorder and any physical illness. There were no significant differences between the groups in the MADRS total scores or in suicidal ideation item. Both groups had low scores on all the subscales of the ISSI indicating poor social networks and there were no statistically significant difference between the groups. The results remained the same when the scores on each subscale of ISSI were adjusted separately for potential confounders in a General Linear Model.

**Conclusions:** SAD patients could have poor social networks and a rather long-lasting social impairment of a considerable magnitude.

**Keywords:** SAD; Non-seasonal MDD; Social network; ISSI

#### P41

Psychosocial functioning and social adjustment of seasonal affective disorder. Patients in comparison with other mood disorder samples and with a community cohort

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**Background:** Even though, there is an abundant literature showing deficiencies in the social function of patients with various mood disorders, the psychosocial functioning of seasonal affective disorder (SAD) patients has not yet been specifically studied.

**Methods:** We studied the psychosocial functioning by using the Global assessment of functioning (GAF) scale and the social adjustment by using the Social Adjustment Scale-Self-Rating version (SAS-SR) of a group of depressed SAD patients (n=20) and compared the findings with the GAF and SAS-SR data from 9 mood disorder samples and one community sample, retrieved from the published literature. These selected studies had used a similar diagnostic frame and similar instruments as the present study and enough data to make comparisons by the Student's t-test possible.

**Results:** The GAF ratings of the SAD group were comparatively low reflecting moderate malfunctioning and were in parity with the ratings in the patients with dysthymia. The SAS-SR scores of SAD patients were comparatively high, reflecting maladjustment. Compared to a community sample, the SAD patients were functioning poorly in all 8 domains (work, leisure and social, family, extended family, marital relation, parent role, economy and overall adjustment) and the differences were statistically significant except concerning the 'family' and the 'parent' roles. In comparison to other clinical mood disorder samples, the social adjustment of the SAD patients was equally impaired in several role areas.

**Conclusions:** The results indicate that depressed SAD patients, like other mood disorder patients, could have considerable psycho-

social impairments. **Keywords:** SAD; Psychosocial functioning; GAF; Social adjustment; SAS-SR.

#### P42

A comparative study of the efficacy of repetitive transcranial magnetic stimulation (rTMS) at low frequency, of the rTMS-paroxetine association, and of clomipramine in the treatment of major depressive episodes of acute severity: Preliminary results

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**Aims:** To compare the antidepressant efficacy of treatment with low frequency rTMS alone, with the rTMS-paroxetine association, and with clomipramine, when dealing with major depressive episodes of acute severity.

**Method:** Twelve inpatients suffering 26) were from major depressive episodes of acute severity (HDRS-21 items score randomized in three groups of treatment: rTMS only, rTMS-paroxetine and clomipramine. We used the following stimulation parameters: Frequency: 1 Hz, Intensity: 110% of the motor threshold, Train duration: 60s, Inter-train interval: 180s, 2 trains per session, 10 sessions per day over a 10-day period, with a total of 12,000 stimuli. Seven clinical assessments (D-7/D-1, D0, D7, D14, D21, D28 and D42) allowed to compare the treatments antidepressant efficacy (HDRS-21 items, MADRS, CGI) and their tolerance (UKU scale).

**Results:** By the end of the 2nd week of treatment, the mean of the scores on the depression scales is inferior in the rTMS group to that of the clomipramine group (p=ns). The comparison of the CGI score evidences a lower severity of the pathology in the rTMS group and the rTMS-paroxetine group at D14 and a superior efficacy/tolerance ratio from D14 to D42.

**Conclusions:** Preliminary results speak in favor of a therapeutic efficacy of rTMS similar to that of clomipramine with a shorter reaction time to rTMS. A tendency to better tolerance can be observed in the group treated with rTMS. Further research is necessary to confirm these data which result from an intermediary analysis.

#### P43

Working memory function in patients with major depression (DSM-IV) after ECT treatment: Pilot study

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**Introduction:** Electroconvulsive therapy (ECT) is the most effective treatment in a variety of psychiatric syndromes (especially mood disorders). However one of its adverse effects is neurocognitive dysfunction. Declarative memory impairment after ECT is unquestionable and well investigated. There are only few ambiguous studies focused on nondeclarative and immediate memory changes during ECT.

**Method:** A pilot study of immediate (working) memory changes in depressed patients treated with ECT (n=11; bitemporal ECT 3 times a week) or selective serotonin reuptake inhibitors (n=11) was conducted in patients who fulfilled DSM-IV criteria for major unipolar depression. Hamilton Depression Rating Scale (HDRS) and Beck Depression Inventory (BDI) were used to assess efficacy of antidepressant therapy. Cognitive functions were assessed with

neuropsychological tests: Stroop A and B, TMT (Trial Making) A and B. The patients' status was evaluated 1 day before the treatment and 1 day, 1 month after its commencement.

**Results:** Patient's working memory was slightly, but not statistically significantly impaired 1 day after ECT treatment. However there was statistically significant improvement in working memory 1 month after ECT treatment. There were no differences between ECT and pharmacologically treated groups at the 1 month of therapy. There was a significant correlation between clinical recovery and working memory functioning.

**Conclusion.** ECT treatment only temporarily affect working memory function. The improvement of function may be due to clinical recovery from depressant symptomatology.

#### P44

Study of status and role of social support in depressed individuals with different personality styles (sociotropy/autonomy)

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Social support is considered as an important moderating factor in stress-disorder relation. Many researchers have found protective effects of social support against depression, especially when individuals experience major negative life events. Also there are writings and reports suggesting negative and non beneficial effect of social support. After, Beck proposed the role of cognitive personality schema (personality styles) on psychopathology of depression, researchers had supposed that social support has differential effects on individuals due to their personality sub organizations. This study examined the status and moderating role of social support on severity of depression in depressed and normal participants. The participants, 91 clinically depressed and 40 normal aged 15-50, responded to PSI, ISSB and BDI. The results showed that a level of one year perceived social support was higher in a normal group, also there was a negative correlation between social support and severity of depression in sociotropic depressed individuals, who always invest on interpersonal relationships and evaluate their self worthiness based on the rate of affection and support received from others, that is, low social support in sociotropic individuals associated with high depression. However, in autonomous people who stress on their independence, freedom and self-definition, perceived social support has low protective and moderating effect on depression. Detailed results were discussed with regard to psychoanalytic theories and cognitive model of Beck about development and treatment of depression.

#### P45

Pharmacological treatment of late-life depression

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Late-life depression is common serious health problem with pharmacotherapy response rate (Solai, 2000) and is frequently manifested in atypical form with somatic symptoms (Gottfries, 1996, Kurtzhaler, 2001). Our study designed as retrospective assessment of 60 elderly patients in the treatment of depression. Patients fulfilled inclusion criteria for depression with or without dementia. 38 patients were treated with citalopram 20 mg daily, 8 patients used sertraline 75mg daily and 6 patients with paroxetine 20mg daily.

Incidence of adverse events during antidepressive therapy was monitored. Citalopram was the most frequently used and best-tolerated antidepressant. Each of 60 patients suffered from at least one-comorbid chronic somatic disease.

#### P46

African women with depression: The effect of imipramine and fluoxetine on body mass index and leptin secretion

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Treatment of depression is often accompanied by weight changes. Previous studies indicate that leptin plays no role in this change, despite showing a strong correlation with body mass index (BMI) in healthy people. The aim of this study was to evaluate the effect of imipramine and fluoxetine on BMI and its correlation with leptin. 18 depressed female patients randomly received either drug for 3 months. BMI was calculated and fasting blood samples were assayed for glucose, leptin, insulin, free fatty acid (FFA) and lipids. The difference between the changes in BMI (imipramine +1.0 kg/m<sup>2</sup>; fluoxetine -0.5 kg/m<sup>2</sup>) was statistically significant ( $p < 0.05$ ). There was a significant positive correlation between overall BMI and leptin ( $r = 0.784$ ;  $p < 0.001$ ) but not between BMI and insulin or FFA. However, fasting insulin levels dropped substantially in the imipramine group. We conclude that since weight gain in the imipramine group was associated with decreasing insulin levels, it should be used with caution in patients at risk for developing Type 2 diabetes.

#### P47

Community treatment of women with depressive illness: Audit of prescribing sequence, allied strategies and documented outcomes in a West Dublin sector

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**Introduction and Method:** RCTs of antidepressant treatment are limited by exclusion criteria and treatment duration. This study examines the sequence of antidepressant prescribing, augmentation, psychotherapies and outcome in the treatment of women with depression attending a community psychiatric service in West Dublin using a retrospective case review method.

**Results:** A total of 78 women were being treated for depression with a mean age of 43years (range 17-88) for a mean duration of 40.76 weeks (standard deviation 30.83). 43 (55%) patients had been treated by their GP prior to referral, 21 were continued on the antidepressant initiated by their GP (50%). Initial antidepressant choice at the clinic was an SSRI for 45 women (57%), a TCA for 19 (24%) and an SNRI for 6 (8%). 18(23%) women responded to the initial antidepressant. The mean number of antidepressants prescribed was 3.48(sd = 2.47, range 1-10). The first AD switch was to a different class for 48 patients (62%) Pharmacological augmentation was used for 31(40%) patients including Buspirone, Lithium and Carbamazepine, but 64(82%) patients were prescribed additional medications, predominantly anxiolytics and hypnotics. Individual Community Mental Health Nurse support was provided to 42(54%) patients, 27(35%) patients were referred for occupational

therapy and 31(40%) for psychotherapy, 18(23%) for CBT. Of the total group 72(92%) patients had either partial or full recovery.

**Discussion:** A wide range of pharmacological and ancillary treatment were used in a community mental health setting for depression. Although only a small proportion of women responded to the initial antidepressant overall outcome was positive for 92%.

#### P48

The efficacy of milnacipran treatment in depression: 6 month's experience

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Depression is one of the most frequent and grave psychical alienations/conditions. Our 6-month follow-up comprised 12 patients using milnacipran, 100 mg per day. We evaluated HDRS and HARS at initiation and used the CGI. Two patients were removed from our follow-up - one patient discontinued her medication in the fourth month, and the other was hospitalized due to a risk of suicidal tendencies. In the second month we did not observe any strong amelioration - HDRA=19.8 on average, but in the sixth month HDRS reached 7.1 points. Milnacipran appears to be a safe, well-tolerated, highly effective antidepressant, with minimal undesirable effects, in the treatment of intermediate to hard depressive episodes. The results of our clinical experience will determine whether milnacipran will become the first line medicament in the treatment of depression (Montgomery, 1999).

#### P49

Specific and non specific factors in the psychotherapeutic change

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**Background:** A review of medical literature since 20 years has shown an increased interest in therapeutic alliance as a non specific factor of psychotherapeutic relationship. For many authors therapeutic alliance appears to be a determinant factor in the improvement during and after therapy.

**Objective:** The author's aim was to study the bond between specific (psychoanalytic therapy) and non specific factors (therapeutic alliance) during the therapeutic process.

**Method:** We randomized 74 depressed out-patients: one group received psychoanalytic psychotherapy and the other supportive psychotherapy. All patients had a pharmacologic treatment by clomipramin. There were not any significant differences concerning socio demographic features between the two populations. Evolution was estimated by the GAS (Global Assessment Scale). The two treatments costs were estimated too.

**Results:** The clinical evolution of the psychoanalytic psychotherapeutic group was better than that of the supportive psychotherapeutic group. Further, psychoanalytic psychotherapeutic treatment was less expensive than the other. Only the high working alliance sub-group increased its outcome in the supportive psychotherapy group, whereas both the high and the low working alliance sub-group increased their outcome in the psychoanalytic psychotherapeutic group.

**Conclusion:** This preliminary study suggests, in addition to a better cost-effectiveness of psychoanalytic psychotherapy than supportive psychotherapy for depressed patients, that when there are psychoanalytic specific factors, working alliance is less important for the outcome.

#### P50

A comparative study on the outcome of psychotherapy between 'neurotic' and personality disorders

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The purpose of this study was to establish whether or not a difference exists, regarding the outcome, between the three examined groups of patients who followed a program of psychotherapy without simultaneously receiving psychotropics. Eighty-two (82) patients were selected at random from a total of those who had completed a psychotherapeutic program. The patients selected were divided into three groups. The first group included those who, according to DSM-IV, had a diagnosis on the Axis I. The second group included those with a diagnosis on the Axis II and the third one with a diagnosis on both Axes. Besides the DSM-IV the M.M.P.I. and M.C.M.I. were used. The psychotherapy administered was a psychodynamic one. The parameters of sex, age, diagnosis and outcome were examined. From the results there seems to exist an obvious predominance in the improvement of the patients with a diagnosis on Axis I (significantly improved: 93,75%). On the other hand the patients with a diagnosis on Axis II significantly improved 64,7% and finally those with a diagnosis on both Axis 77,5% correspondingly. According to the results, we can conclude that the patients who tend towards what used to be called 'Neurosis', respond better to a psychodynamic type of psychotherapy than those who are closer to what we call personality disorder who nevertheless respond quite well too.

#### P51

Patients' and physicians' therapy expectations and treatment outcome of hospital treated depression - a comparison of younger and older patients

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**Background:** Depression is the most frequent mental disorder in the elderly. Nevertheless only about 10% are being treated professionally in that age group. One reason seems to be the negative old-age stereotype.

**Methods:** 21 elderly (mean age 68 years) and 24 adults (mean age 46 years) who met the criteria for depression and were treated on the same wards were assessed during the time of hospital treatment. The 'Montgomery Asberg Depression Rating Scale' (MADR-S) and two self-report-scales: The German version of the Centre of Epidemiological Studies Depression Rating Scale (CES-D), the 'Die Allgemeine Depressionsskala' (ADS) and 'The Geriatric depression rating scale' (GDS) were used. The prognosis was evaluated during the first days of hospital treatment. At the end, the achievements were judged by physicians and patients.

**Results:** Expectations were more pessimistic for the elderly patients among the doctors. At discharge there were no significant

differences between the two age groups concerning residual depressive symptoms. (Full remission 66,6% v. 66,7%). Elderly patients needed significant longer treatment (Adults v. elderly 37,5d v. 50,3d;  $p=0,04$ ). Compared to the younger patients the elderly were more satisfied with the results.

**Conclusion:** Negative old-age stereotypes or better a too positive younger age stereotype are present among doctors, but do not correlate with a worse treatment outcome of late life depression.

## P52

The effectiveness of bibliotherapy - cognitive-behavioural selfhelp - in patients with partially remitted depression

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**Introduction:** Previous studies indicate that cognitive-behavioral psychotherapy is an effective treatment in patients with Major Depressive Disorder. In combination with pharmacotherapy cognitive behavioral psychotherapy showed more effectiveness compared to each treatment strategy alone. Recent investigations indicate that Bibliotherapy 'reading a cognitive behavioral self help book' significantly reduces both the scores of the Hamilton Rating Scale for Depression (HAMD) and of the Beck Depression Inventory (BDI) in patients with Major Depressive Disorder compared to controls.

**Methods:** In our study we included patients with the presence of the diagnosis partially remitted Major Depressive Disorder or Dysthymia although they received optimal pharmacotherapy. Patients (N = 90) were randomly allocated to two groups starting reading the book immediately (treatment group) or remained in observation for another 6 weeks (waiting group) while pharmacotherapy remained unchanged. Fifty six patients (male: 17; female: 39; age: 47 yrs) have either completed the Bibliotherapy and read the self help book 'Feeling good' by D. Burns or completed the 6 weeks waiting time. We tested if patients with partially remitted depression or dysthymia having received Bibliotherapy show improvements in scores of the HAMD and BDI rating scale compared to waiting group.

**Results:** In our preliminary results we included all patients who had completed the study (N = 56). A significant reduction of HAMD ( $p=0,049$ ) in the treatment group in comparison to the waiting group, but almost significant in BDI ( $p=0,06$ ).

**Conclusion:** The initial evidence from the current study showed that Bibliotherapy is effective in reduction of HAMD and BDI scores.

## P53

Effects of combined administration of imipramine and amantadine in patients with drug-resistant depression

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**Background:** Ca. 30% of patients diagnosed as suffering from unipolar depression do not respond to conventional therapy. Amantadine is suggested to have potential to augment antidepressants effect.

**Methods:** 12 patients were recruited with major, recurrent depression according to DSM IV who met criteria of drug-resistant depression. At the beginning the two-week wash out period was allowed. Thereafter the patients were treated with imipramine twice a day (100-150 mg/day) for 6 weeks. Then amantadine was introduced (twice a day, 100-150 mg/day), together with imipramine for further 6 weeks. After the period of combined administration the patients were treated with imipramine only, for additional 2 weeks. Hamilton Depression Rating Scale (HDRS), Beck Depression Inventory (BDI), Automatic Thoughts Questionnaire (ATQ), Hopelessness Scale (HS) and Rosenberg Self Esteem Scale (RS) were used to assess efficiency of antidepressant therapy. The patients' status was evaluated before the treatment and 3, 6, 9,12 and 14 weeks after its commencement.

**Results:** The comparison between the first and the last examination shows statistically significant difference. Scores on HDRS decreased from  $32.2 \pm 1.2$  to  $12.6 \pm 1.3$ . Ratings according to BDI lowered from  $48.3 \pm 2.3$  to  $18.3 \pm 1.5$ . ATQ has shown a decrease from  $132 \pm 3.5$  to  $87.0 \pm 3.5$ . Scores on HS declined from  $18.2 \pm 0.4$  to  $9.5 \pm 0.8$ . The scores on RS has shown an increase from  $15.1 \pm 1.1$  to  $43.3 \pm 4.5$  points.

**Conclusions:** Joint therapy with imipramine and amantadine may be successful in the treatment-resistant unipolar depression.

## P54

Zinc supplementation augments antidepressant therapy in unipolar depression: A preliminary placebo-controlled study

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**Background:** A growing body of evidence involves a derangement of zinc homeostasis in mood disorders. In general, depression is connected with lower blood zinc levels, which are increased by effective antidepressant therapy.

**Methods:** A placebo-controlled, double blind pilot study of zinc supplementation of antidepressant therapy was conducted in patients with major, unipolar depression according to DSM IV criteria. Patients received zinc supplementation (n=10; 25 mg of Zn<sup>2+</sup> once daily) or placebo (n=10) and were treated with standard antidepressant therapy (tricyclic antidepressants or selective serotonin reuptake inhibitors) after at least 1 week washout period. Hamilton Depression Rating Scale (HDRS) and Beck Depression Inventory (BDI) were used to assess efficacy of antidepressant therapy. The patients' status was evaluated before the treatment and 2, 6 and 12 after its commencement.

**Results:** Six patients were excluded during the trial because of failure to complete all tests, delayed tests or serious family problems (spouse death). At the end of the study, groups consisted of 8 placebo-treated and 6 zinc-supplemented patients. Antidepressant treatment significantly reduced HDRS scores by the 2nd week of treatment in both groups, and lowered BDI scores at the 6th week in zinc treated group. Zinc supplementation significantly reduced

scores in both measures (HDRS and BDI) at 6- and 12-week of supplementation when compared with placebo treatment.

**Conclusions:** This preliminary study is the first demonstration of the benefit of zinc supplementation in antidepressant therapy. The mechanisms might be related with modulation of glutamatergic or immune systems by zinc ion.

## P55

Duloxetine vs. placebo in the prevention of relapse of major depressive disorder

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**Purpose:** Duloxetine hydrochloride (Cymbalta(TM)) is a balanced and potent reuptake inhibitor of both serotonin and norepinephrine. Duloxetine's efficacy and safety in the acute treatment of the emotional and physical symptoms of depression has been established in several studies. The present study compared duloxetine 60 mg once daily with placebo in time to relapse in patients with major depressive disorder (MDD).

**Methods:** In this randomized, double-blind, multicenter, placebo-controlled study, 533 outpatients with MDD received duloxetine 60 mg/d for up to 12 weeks. Responders were randomized to either duloxetine or placebo for 26 weeks (continuation phase). The primary efficacy analysis compared time to relapse using log-rank test.

**Results:** At the end of acute treatment, 280 (52.5%) patients met continuation phase criteria and 278 patients entered the continuation phase. Time to relapse was significantly longer for patients treated with duloxetine than for those treated with placebo. During the continuation phase, significantly fewer patients receiving duloxetine (n=23; 17.4%) relapsed compared to patients receiving placebo (n=39; 28.5%). Duloxetine treated patients scored better on most secondary efficacy measures that included the domains of depression, anxiety, painful physical symptoms, and quality of life. Overall, 11% and 4% of duloxetine treated patients discontinued in the acute and continuation phases, respectively.

**Conclusions:** During long-term therapy, duloxetine significantly increased time to relapse and performed better than placebo on measures of depression, anxiety, painful physical symptoms, and quality of life. Duloxetine was safe and well tolerated during both the acute and long-term continuation phases, similar to previous acute treatment studies.

## P56

Remission in placebo-controlled trials of duloxetine with an SSRI comparator

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**Purpose:** Remission is increasingly recognized as the optimal outcome of the acute phase of antidepressant therapy. Evidence suggests that therapy with dual reuptake inhibitors may bring about higher rates of remission than SSRIs. Duloxetine is a dual reuptake inhibitor that has well-established efficacy and safety in clinical trials. Here we examine the remission rates in controlled studies of duloxetine.

**Method:** Pooled data from all 6 randomized, double-blind, placebo controlled clinical trials comparing duloxetine with an SSRI in the treatment of depression were analyzed. The primary definition of remission was a score of  $\leq 7$  on the 17-item Hamilton Rating Scale for Depression (HAM-D17). Because the threshold for entry into these studies was lower than traditionally employed thresholds (HAM-D17 = 15), a subset of patients with baseline HAM-D17 = 19 was also examined.

**Results:** Remission rates were 43% (300/697) for duloxetine, 38% (162/423) for SSRIs and 28% (144/507) for placebo ( $p < .001$ ). Odds ratios were 1.22 (95% confidence interval, CI: 0.95, 1.56) for duloxetine/SSRI and 1.90 (95% CI: 1.49, 2.43) for duloxetine/placebo. In patients with baseline HAM-D17 scores = 19, remission rates were 38% (163/429) for duloxetine, 29% (70/245) for SSRI and 18% (51/289) for placebo ( $p < .001$ ). Odds ratios were 1.53 (95% CI: 1.09, 2.15) for duloxetine/SSRI and 2.86 (95% CI: 2.00, 4.10) for duloxetine/placebo.

**Conclusion:** Remission rates for duloxetine were statistically significantly greater than placebo and numerically greater than SSRI in controlled clinical trials. In patients with baseline HAM-D17 scores = 19, remission rates for duloxetine were statistically significantly greater than both SSRI and placebo.

## P57

Safety profile of duloxetine vs. paroxetine

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**Purpose:** To compare the safety and tolerability of antidepressant duloxetine, a dual reuptake inhibitor of serotonin and norepinephrine, over a wide dose range with the SSRI paroxetine in patients with major depressive disorder.

**Methods:** Data from four 8-week randomized, double-blind, placebo-controlled studies were pooled to compare the safety and tolerability of duloxetine at doses ranging from 40 mg - 120 mg/d with paroxetine 20 mg/d.

**Results:** In the pooled database (placebo N=371; duloxetine N=736; paroxetine N=359), 4% of placebo, 8% of duloxetine, and 6.1% of paroxetine patients discontinued due to adverse events with no statistically significant difference between duloxetine and paroxetine. The only significant difference between duloxetine and paroxetine in treatment-emergent adverse events was for decreased appetite (duloxetine: 4.2%; paroxetine: 1.4%). Nausea rates were 3.8% for placebo, 14.4% for duloxetine, and 12% for paroxetine. Changes in blood pressure measures and laboratory analytes were similar between duloxetine and paroxetine treatment groups. 1.6% of placebo, 1.5% of duloxetine, and 0.28% of paroxetine patients had three consecutive elevations of either systolic or diastolic blood pressure.

**Conclusion:** The safety and tolerability profile of duloxetine administered over a wide dose range compares very favorably with



a low dose of paroxetine. Duloxetine is a safe and well-tolerated antidepressant.

## P58

Comparison of sexual functioning in patients receiving duloxetine or paroxetine: Acute and long-term data

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**Objectives:** Evaluate sexual functioning following acute- and long-term treatment with duloxetine, paroxetine or placebo.

**Method:** Acute-phase data obtained from four 8-week, double-blind studies, with patients randomized to duloxetine (20–60 mg BID; n=736), paroxetine (20 mg QD; n=359), or placebo (n=371). Long-term data obtained from extension phases, in which acute treatment responders received duloxetine (40 or 60 mg BID; n=297), paroxetine (20 mg QD; n=140), or placebo (n=129) for 26 additional weeks. Sexual function evaluated using the Arizona Sexual Experience Scale (ASEX).

**Results:** In patients without initial sexual dysfunction, the probability of acute phase sexual dysfunction onset was significantly lower for duloxetine-treated patients compared with those receiving paroxetine (p=.015), although both rates were significantly higher than placebo (p=.007 and <.001, respectively). Long-term data revealed that sexual function improved (ASEX total score reduced) in 70.9% of duloxetine-treated patients between baseline and endpoint, compared with 57.6% for paroxetine (p=.060). For ASEX Questions 1 and 2, a significantly greater proportion of duloxetine-treated patients reported improvement compared to paroxetine (p=.050 and .037, respectively). No significant differences were found in Questions 3, 4, or 5.

**Conclusion:** In these studies, the incidence of acute phase sexual dysfunction development among patients receiving duloxetine across its dose range (40–120 mg/d) was significantly lower than that of paroxetine at the low end of its dose range (20 mg/d). On certain ASEX questions, a significantly higher percentage of duloxetine-treated patients reported improvement in sexual functioning compared with paroxetine.

## P59

Efficacy of sildenafil citrate for the treatment of erectile dysfunction in men in remission from depression after treatment with or without serotonin reuptake inhibitors

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Erectile dysfunction (ED) and depression are highly prevalent and frequently comorbid. Sildenafil citrate is effective for treating ED in men with depression and in men taking antidepressants. In a 12-week randomized placebo-controlled trial, we evaluated the efficacy of sildenafil (50 mg, flexible to 25 or 100 mg) in men (mean age, 53 years) with a history of ED when their major depressive

disorder (MDD) was diagnosed, and which persisted after MDD was treated to remission. Because serotonin reuptake inhibitors (SRIs) can cause ED, we performed a subanalysis on data collected from this study to compare the relative efficacy of sildenafil in patients taking and not taking an SRI antidepressant. Efficacy was assessed using baseline and end-of-treatment (EOT) scores on the International Index of Erectile Function (IIEF) questions 3 (Q3; frequency of penetration) and 4 (Q4; frequency of maintained erections after penetration), and on the Erectile Function (EF) domain (Q1–Q5, Q15). All sildenafil-treated patients improved significantly on Q3, Q4, and the EF domain compared with placebo-treated patients (P values = 0.0001). In the sildenafil group, 29% (24/83) were taking SRIs. At EOT, mean IIEF scores were comparable between patients taking and not taking SRIs (Table). Results from the clinical trial demonstrate that sildenafil effectively treated ED that was refractory to treatment of MDD to remission. The results from the subanalysis suggest that SRI therapy does not interfere with the successful management of ED with sildenafil.

Table. Mean Scores on IIEF Variables in the Sildenafil-treated Groups

	Taking SSRI		Not taking SSRI		All Patients	
	(n=23)	(n=54)	(n=77)			
	Baseline	EOT	Baseline	EOT	Baseline	EOT
IIEF						
Q3	1.6	3.1	1.7	4.0	1.7	3.8
Q4	1.4	3.2	1.8	3.7	1.5	3.5
EF Domain	9.3	17.5	10.8	22.8	10.4	21.6

## P60

Sexual dysfunctions in patients with depression treated with SSRI: A therapeutic approach

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**Objective:** To assess the efficacy of trazodone in the treatment of sexual dysfunctions, mainly erectile, observed in patients with Major Depressive Episode (DSM IV TR 2000) who were previously treated with SSRI.

**Method:** A group of 8 males, aged between 28 and 42, diagnosed with Major Depressive Episode in the previous month. Before admission to our hospital, each male was treated with some form of SSRI. In addition each patient was evaluated using the HAMD scale, a structured interview regarding the quality of life since initiation of treatment, and an evaluation on UKU Sexual Dysfunction Scale for Men that comprises 6 items. Trazodone treatment was initiated at therapeutic levels of 150 mg/day and SSRI therapy was discontinued.

**Results:** A steady decrease was reported in HAMD score (from 24,6 at psychiatric admission to 16,4 two weeks after the switch in drugs). At psychiatric admission, all the patients were suffering from sexual dysfunction: erectile dysfunction, ejaculatory dysfunction, or decreased libido (a medium score of 6,5 on UKU Sexual Dysfunction Scale for Men). After 2 weeks of trazodone treatment four patients reported a significant improvement in sexual dysfunction (1 point on UKU Scale), one presented a medium improvement (3 points) and the remaining patients reported no, or minimal, change in their sexual function (6 points).

**Conclusion:** Trazodone is a reliable treatment for depression-associated sexual dysfunctions and could be beneficial in cases of SSRI-induced or aggravated sexual symptoms.

**P61**

Olanzapine/fluoxetine combination in treatment-resistant depression with current SSRI failure

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**Objectives :** Olanzapine/fluoxetine combination (OFC) has shown effectiveness in patients with treatment-resistant depression (TRD). The present post hoc subanalyses examined OFC in TRD patients who had experienced at least two treatment failures in their current episode, one while on an SSRI. Such a group is likely representative of TRD patients in clinical settings.

**Methods :** Subjects had a diagnosis of unipolar, non-psychotic TRD. Study 1 was an 8-week randomized, double-blind trial comparing OFC, olanzapine, fluoxetine, and nortriptyline in subjects (n = 500) with retrospective SSRI failure and prospective nortriptyline failure. Study 2 was a 12-week randomized, double-blind trial comparing OFC, olanzapine, fluoxetine, and venlafaxine in subjects (n = 483) with retrospective SSRI failure and prospective venlafaxine failure. A mixed-effects model repeated measures regression analyzed the subsample of patients who had experienced an SSRI failure in their current depressive episode (Study 1 : n = 324, Study 2 : n = 350).

**Results :** In Study 1, the OFC group had significantly greater mean baseline-to-endpoint reduction in Montgomery-Åsberg Depression Rating Scale (MADRS) total score (-9.08) than the olanzapine group (-5.58, p = .005), but was not different from the nortriptyline group (-7.10, p = .176) or the fluoxetine group (-7.87, p = .325). In Study 2, the OFC group (-14.64) had significantly greater mean baseline-to-endpoint reduction than the olanzapine (-9.42, p < .001) and fluoxetine (-10.67, p = .006) groups, but was not different from the venlafaxine (-14.68, p = .978) group.

**Conclusion :** OFC showed significantly greater reductions in depressive symptoms than olanzapine (Studies 1 and 2) or fluoxetine (Study 2) in TRD patients whose depression was not responding to an SSRI in their current episode.

**P62**

A double-blind, randomised, multicentre, placebo controlled comparison of hypericum extract STW 3-VI with Citalopram in the treatment of moderate depression

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The objective of the present multicenter, double-blind, randomised, placebo-controlled clinical study was to investigate the efficacy and tolerability of Hypericum extract STW 3-VI for the treatment of moderate depression compared to the SSRI Citalopram and to Placebo. Three-hundred-ninety-four outpatients with moderate depression were enclosed in this study. Hypericum extract (STW 3-VI, 900 mg) or Citalopram (20 mg) or Placebo were administered once daily for 6 weeks. During the treatment phase, the course of depression was documented by use of rating scales (HAMD (item 1-17), BfS, CGI). From almost identical values (about 22.0) at time of patient inclusion, the HAMD score was reduced to 10.3 down till 6.4 (Hypericum extract and Citalopram), compared to 13.0 down till 6.9 (placebo). After 6 weeks treatment, 54.2% of the patients in the Hypericum group and 55.9% in Citalopram group were assessed as

therapy responders, compared to 39.2% in the placebo group. The analyses of the other secondary endpoints confirmed these findings. In most cases, the investigators assessed tolerability as “good” or “very good” (day 42: hypericum 95.4%, Citalopram 84.3%, placebo 92.3%). In the hypericum group only 10 adverse events with possible, probable or certain relation to study medication were documented, compared to 50 (Citalopram) and 21 (Placebo). The results of the study demonstrated the therapeutic equivalence (statistical non-inferiority) of Hypericum extract STW 3-VI in a once-a-daily dosage for 6 weeks compared to Citalopram, the superiority of Hypericum extract compared to placebo and the better tolerability of Hypericum extract compared to Citalopram.

**P63**

Efficacy of citalopram versus escitalopram: The role of the R- and S-enantiomers

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Citalopram is a highly selective serotonin reuptake inhibitor (SSRI) antidepressant consisting of a racemic 1:1 mixture of R(-) and S(+) enantiomers. Nonclinical studies have shown that the SSRI activity of citalopram is attributable to the S-enantiomer, escitalopram, which has been developed as a new single-enantiomer drug. Initial nonclinical and clinical studies comparing escitalopram and citalopram to placebo found that corresponding doses of these two drugs (that is, containing the same amount of the S-enantiomer and therefore expected to have the same amplitude of effect) resulted in a better effect for escitalopram. These surprising results suggested that, although essentially inactive with regards to SSRI activity, the R-enantiomer in citalopram counteracts the effect of the S-enantiomer. Escitalopram has greater efficacy and faster time to symptom relief than comparable doses of citalopram in biochemical, functional and behavioural experiments. The lower efficacy of citalopram in these nonclinical studies is due to the counteraction of the effect of the S-enantiomer by the R-enantiomer, possibly via an allosteric interaction with the serotonin transporter. Data from controlled clinical trials in patients with major depressive disorder consistently show better efficacy [measured as change from baseline on the Montgomery Åsberg Depression Scale (MADRS)], higher rates of response (>=50% decrease in baseline MADRS score) and remission (MADRS<=12), and faster time to symptom relief with escitalopram than with citalopram. In conclusion, the R-enantiomer present in citalopram counteracts the activity of the S-enantiomer, thereby providing a basis for the pharmacological and clinical differences observed between citalopram and escitalopram.

**P64**

Escitalopram is effective and well tolerated: A placebo-controlled, flexible-dose study in depression in primary care

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Escitalopram was compared to placebo in moderately to severely depressed patients in primary care with citalopram as the active reference. Patients were randomised to receive flexible doses of 10-20mg/day escitalopram (n=155), 20-40mg/day citalopram (n=160), or placebo (n=154) over an 8-week double-blind period. The primary efficacy parameter was the change from baseline in the MADRS total score to last assessment. Escitalopram-treated pa-

tients showed a statistically significant therapeutic difference of 2.9 points ( $p=0.002$ ; LOCF) when compared to placebo and escitalopram treatment was consistently and statistically significantly more efficacious than placebo from Week 1 onwards. Analysis of Clinical Global Impression-Severity (CGI-S) and Improvement (CGI-I) confirmed the primary efficacy results. By Week 8, significantly more patients had responded ( $\geq 50\%$  decrease in baseline MADRS) to treatment with escitalopram than with citalopram ( $p=0.021$ ; OC) or placebo ( $p=0.009$ ). Analysis of time to response revealed that, based on median survival times, escitalopram-treated patients responded to treatment 8.1 days faster than citalopram-treated patients ( $p<0.05$ ). At endpoint, significantly more patients ( $p=0.036$ ; OC) treated with escitalopram (52.1%) than those treated with citalopram (42.8%) were in remission (MADRS $\leq 12$ ). Both escitalopram and citalopram were well tolerated. Both escitalopram and citalopram-treated patients had placebo-level adverse event withdrawal rates (3% and 4%, respectively). This study demonstrates the consistent antidepressant efficacy and excellent tolerability of escitalopram 10–20mg/day in primary care patients with Major Depressive Disorder.

### P65

Efficacy of escitalopram in patients with severe depression

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This pooled analysis of data from three clinical trials compared the efficacy of escitalopram with that of citalopram in the treatment of a sub-population with severe depression. All trials were double-blinded with three arms (escitalopram, citalopram as active-reference drug, and placebo) and allowed the maximum escitalopram dose (20mg). Severe depression was defined as  $\geq 30$  on the Montgomery-Åsberg Depression Rating Scale (MADRS). A total of 506 severely depressed patients were included (169 received escitalopram, 171 received citalopram, and 166 received placebo). Clinical response was defined as  $\geq 50\%$  reduction in baseline MADRS score, and remission as a MADRS total score  $\leq 12$ . The primary efficacy parameter, mean change from baseline to end of treatment in the MADRS total score, based on last-observation-carried-forward, was significantly higher in the escitalopram group compared with the citalopram group ( $p=0.003$ ). A significant difference from baseline in MADRS total score in favour of escitalopram was observed as early as Week 1 ( $p=0.01$ ). There was a significant difference in response between escitalopram and citalopram (56% vs. 41% respectively,  $p=0.007$ ). A borderline significant difference was also observed for remission rates in the observed cases analysis (43% vs. 33% respectively,  $p=0.07$ ). Results from analyses of two secondary endpoints, the Hamilton Depression and the Clinical Global Impression-Severity and -Improvement scales, were consistent with those from the primary efficacy parameter. Thus, the benefits of escitalopram versus citalopram were demonstrated both in terms of magnitude of effect and time of onset of action.

### P66

Evidence for dose-response of citalopram and escitalopram in the acute therapy of major depression by use of the HAM-D6 and MADRS6

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One of the most important problems in clinical psychopharmacology is the apparently low association between dose and clinical effect of antidepressants. In a previous study (1) we have demonstrated that the six-item subscale of HAM-D, the one-dimensional depression factor (HAM-D6), showed a linear dose response for citalopram, in the dose range of 10–40mg, with no difference between 40mg and 60mg in major depression. The HAM-D6 has previously been shown to demonstrate a dose-response relationship for clomipramine (2). In the present study, we evaluated the dose-response for escitalopram by comparing 10mg and 20mg over 8 weeks in patients with major depression. This was a re-analysis of the Burke et al study (3). Both the HAM-D6 and the corresponding MADRS6 were used in this placebo-controlled study, in which 40mg citalopram was included as an active comparator. The results showed that after 6 and 8 weeks of therapy, 40mg citalopram was as effective as found previously (1). However, 20mg escitalopram was significantly superior to both 10mg escitalopram and 40mg citalopram. (1) Bech P et al. *Psychopharmacology* 2002;163:20–5 (2) Danish University Antidepressant Group (DUAG). *Clin Pharmacol Therapeut* 1999;66:152–65 (3) Burke WJ et al. *J Clin Psychiatry* 2002;63:331–6

### P67

Escitalopram in the treatment of social anxiety disorder: An analysis of efficacy in different clinical subgroups

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SAD is a heterogeneous disorder, and we address the question of whether this new selective serotonin reuptake inhibitor (SSRI) is effective across different clinical subgroups. Escitalopram has demonstrated efficacy for the treatment of social anxiety disorder (SAD) in two placebo-controlled trials. Data from the two similarly designed trials were pooled. Logistic regression was undertaken using clinical and demographic variables and general linear models were used to determine the efficacy of escitalopram in different patient subgroups. Finally, a factor analysis of the primary efficacy parameter, the Liebowitz Social Anxiety Scale (LSAS), was undertaken, and a determination made of whether loading on these factors influenced treatment response. No clinical or demographic variables predicted treatment response based on logistic regression analysis. Thus, escitalopram was effective in both younger and older patients, in males and females, and in patients with more and less severe social anxiety symptoms. The factor analysis revealed 7 LSAS factors; these did not significantly predict response to treatment. Escitalopram is effective across a number of different clinical subgroups of SAD. Data on the efficacy and tolerability of escitalopram support the argument that this novel SSRI should be one of the first-line medications for the treatment of SAD.

### P68

Comparison of escitalopram and citalopram efficacy: A meta-analysis

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Escitalopram is a new SSRI approved for the treatment of major depressive disorder (MDD) and panic disorder. Escitalopram is the therapeutically active enantiomer of citalopram. Its efficacy in the treatment of MDD was compared to that of citalopram. A quantitative meta-analysis was applied to the 1,262 patients in four randomised clinical trials; the comparison was based on response rate and mean change from baseline in MADRS total score at Week 8. Complementary analyses were performed on early MADRS change from baseline (Week 1), in very severely depressed patients (baseline MADRS total score  $\geq 35$ ) and on the influence of the level of severity at baseline. Compared with citalopram, escitalopram-treated patients showed significantly higher response rates (55.5% for escitalopram-treated patients and 50.8% for citalopram-treated patients; odds ratio of 1.35 (CI95% of [1.09-1.70];  $p=0.01$ )) and increased mean change from baseline in MADRS total score at Weeks 1 and 8 (estimated difference of 1.02; CI95% of [0.09-1.95];  $p=0.03$ ). The mean change from baseline in MADRS total score was significantly greater for escitalopram-treated patients than for citalopram-treated patients as early as Week 1 of treatment (estimated difference of 0.63; CI95% of [0.08-1.17];  $p=0.02$ ). In the very severely depressed patients, the superiority of escitalopram over citalopram was even more pronounced, with a positive correlation between response to treatment and the degree of severity of depression. Escitalopram is thus an effective therapeutic treatment for MDD, presenting significant advantages over citalopram.

## Poster Session 2: Anxiety Disorders

### P69

Association of major histocompatibility complex alleles and panic disorder

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**Aims:** Genetic studies in Panic Disorder patients have focused mainly on classical neurotransmitters. There are a very limited number of reports analysing the role of Major Histocompatibility Complex (MHC) on heredability of this illness. The aim of this research has been to look for an role of MHC in Panic Disorder.

**Methods:** Sixty-two patients fitting DSM-IV criteria of Panic Disorder with or without agoraphobia, assessed with the Mini International Neuropsychiatric Interview (MINI) were compared with 43 healthy subjects without current nor previous mental disorder. DNA was extracted from peripheral blood, and after DNA typing, allelic frequencies were compared by X2 test with Yates' correction, and probability values were corrected for the number of comparisons in the case of being significant ( $p<0.05$ ).

**Results:** Twenty-three out of the 62 patients presented an DRB1\*0401 allele, and 25 out of the 62 an DQA1\*0301 on class II, compared with 7 and 8 controls respectively ( $X^2$  of 3.86;  $p=0.04$ , and 3.73  $p=0.05$  respectively). On the other hand, Cw\*0502 allele, was present in 16 controls, but in only 9 patients ( $X^2=5.19$ ;  $p=0.02$ ).

**Conclusions:** In this sample of panic disorder patients, DRB1\*0401 and DQA1\*0301 alleles act as a risk factors for the disease, and the Cw\*0502 allele confer protection upon this illness.

### P70

Cytokines genotype in panic disorder

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**Aims:** Cytokines may play a major role in the development of panic attacks. The aim of this study has been to study cytokines genotype in Panic Disorder and compare it to healthy controls.

**Methods:** Sixty-two patients fitting DSM-IV criteria of Panic Disorder with or without agoraphobia, assessed with the Mini International Neuropsychiatric Interview (MINI) were compared with 43 healthy subjects without current nor previous mental disorder. DNA was extracted from peripheral blood, and cytokines genotyping was performed with PCR-SSP. Allelic frequencies were compared by X2 test with Yates' correction, and probability values were corrected for the number of comparisons in the case of resulting significant ( $p<0.05$ ). Results Panic disorder patients showed a significant increase of genotypic distribution of -511 and +3962 polymorphisms of IL-1 $\beta$  for heterozygotic TC ( $X^2=3.99$ ;  $p<0.04$ ). The +1902 polymorphism of IL-4Ra for the para el heterozygotic genotype GA was also significantly raised in patients ( $X^2=5.62$ ;  $p<0.01$ ).

**Conclusions:** In this sample of panic disorder patients, there is a significant association of c-511TC allele of IL1 $\beta$ , and 1902 gene of IL-4 Ra for the GA allele with the illness. These findings should be replicated in other samples of patients with panic disorder.

### P71

Event-related potentials and emotional processing in subjects with panic disorder

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Subjects with panic disorder (PD) show high scores on alexithymia scales, poor emotional integration, and a tendency to interpret ambiguous stimuli as dangerous and/or threatening. As suggested by several neurobiological evidences, these characteristics might reflect a dysfunction of the right temporo-limbic regions. In the present study, processing of task-irrelevant stimuli with different emotional valence was investigated in 17 drug-free subjects with PD and 21 healthy controls. Thirty channels ERPs were recorded during a visual target detection task with neutral, erotic, threat-related and phobic rare distractors, randomly intermixed with rare target and frequent non-target stimuli. The ERPs microstates corresponding to the N1/P2 and P3a were identified using topographic features and global field parameters. LORETA was used to identify cortical generators of EPRs components for distractor stimuli and to compare the source activity between stimuli and groups. Alexithymia was evaluated by the Toronto Alexithymia Scale in all subjects. Alexithymia resulted to be more frequent in subjects with PD than in healthy controls. The comparison between erotic and

neutral distractors showed an activation of the anterior cingulate, medial frontal regions and insula in healthy controls and a decreased activation of right parieto-temporal areas in subjects with PD. The comparison between panic-specific and neutral stimuli showed no difference in controls and a decreased activity of right temporal areas in subjects with PD. Our results indicate a reduced activation of the right hemisphere temporo-limbic regions during emotional processing in subjects with PD.

## P72

Cognitive style in various types of anxiety disorders

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The aim of the study was to identify cognitive features specific for various anxiety disorders. Patients with generalized anxiety disorder (n=29), panic disorder (n=17) and agoraphobia (n= 16) were studied by means of Repertoire Grids psychological test. Cognitive style of patients with generalized anxiety disorder was characterized by difficulties in their attention switching from narrow circle of frightening beliefs. Basic features of this “tunnel” thinking were rooted in a rigid system of subjective expectations and self-representations, that were weakly related to variety of personal experiences. Hard and tightly interconnected structure of cognitive system blocked patient’s ability of comprehensive and weighted perception of reality. In panic disorder, fragmented subjective representation of feelings and motives was a core feature of cognitive style. This “repression” was related to splitting between descriptive and evaluative components of cognitive functioning, associated with an insufficient ability to oppose different objects to each other. Consequently, the contemplative attitude to the reality dominated over the evaluative one and led to incomplete awareness of personal problems and needs. The characteristic feature of cognitive style in agoraphobia was patients’ inclination to make one-sided, contrast and extreme assessments of reality objects. This led to coexistence of mutually excluding, conflicting personal attitudes and ambivalence. The fundamental cognitive deficit of these patients was found to be weak differentiation of their feelings and needs. This could be obviously a consequence of impoverished descriptive object categorization and predominance of evaluative one.

## P73

Panic attacks associated with topiramate

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Topiramate, a new anticonvulsant is receiving attention for its possible mood-stabilizing effects. Common side effects include weight loss, sedation, fatigue, psychomotor slowing. We describe new-onset panic attacks in a 27 years old woman with bipolar II disorder, after beginning Topiramate. The panic attacks were resolved 3 weeks after Topiramate discontinuation and a treatment with Lamotrigine was successfully introduced. This is the second case report of panic attacks associated with the use of Topiramate (Goldberg, 2001). Panic attacks have not previously been reported in association with topiramate in the epilepsy literature, even if they are described in some premarketing studies. In discussion we wonder about the possible panicogenic mechanism of topiramate (carbonic anhydrase properties, anti-glutamatergic effects). Goldberg JF. *J Clin Psychopharmacol* 2001;21(4):461–2.

## P74

Rearing styles and parental disagreement in panic disorder

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**Objective:** In previous studies, patients with panic disorder (PD) as compared to controls, have reported that their parents were more protective and less caring towards them in childhood. However the consistency of parental attitudes between the two parents has been less studied. This study had two aims: 1) to examine parental rearing styles in patients with panic disorder and 2) analyse the consistency of parental attitudes between the 2 parents.

**Patients and method:** Patients with DSM-IV criteria of PD, with or without agoraphobia were included in the study. Diagnostic criteria were assessed by the Mini International Neuropsychiatric Interview (MINI). They were administered the Parental Bonding Instrument (PBI), and results were compared to a general population random sample.

**Results:** A clinical sample of fifty five patients (20 men and 35 women) were compared to 55 age and sex matched controls. PD patients scored their mothers as being significantly more overprotective than controls (p=0,000). No differences were found between the two groups in caring or in restriction perceived. When we compared the consistency of parental attitudes the patients’ parents were significantly less consistent than those of controls in the overprotection scale (p=0,041). In spite of the parental disagreement in caring was found in both samples, differences between groups weren’t significant (p>0,05).

**Conclusions:** The present study supports the findings that high levels of maternal protection was the predominant mental image reported by patients with PD, using PBI. Also, there was less uniformity in the rearing patterns in overprotection compared to general population.

## P75

Clinical implications of symptom subtypes in panic disorder

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**Aims:** Different studies suggest panic disorder is not a unidimensional condition and panic symptom subtypes do exist. The aim of this study is to define these clinical subtypes and to describe their clinical implications.

**Methods:** Subjects were 102 panic disorder patients of recent onset and seeking treatment for the first time, fitting DSM-IV criteria of PD with or without Agoraphobia, assessed with the MINI interview. Panic severity was measured with the CGI and the Panic Disorder Severity Scale (PDSS). The Mobility Inventory of Agoraphobia (MIA) was used to assess agoraphobia. We assessed patients for the presence of 15 symptoms in their attacks (the 13 listed in DSM-IV, and we disclosed two more symptoms). Data were analyzed with the SPSS 11.0. We performed a factor analysis (varimax rotation) and non-parametric tests were used to test significance levels.

**Results:** Symptoms were divided in three subgroups after the factor analysis. These factors explained the 36.4 of the variance: a dissociative factor (depersonalization, derealization and fainting), a

respiratory one (choking, dyspnea and fear of dying) and a mixed factor (chest pain, sweating, trembling, hot flushes). Patients suffering from symptoms of the dissociative group showed a significantly higher number of panic attacks ( $p=0.02$ ), and higher scores in the MIA ( $p=0.03$ ). Additionally, the presence of dissociative symptoms predicted a worse short-term outcome after 8 weeks on SSRIs treatment ( $p=0.04$ ).

**Conclusions:** Panic disorder patients showing dissociative subgroup symptoms had a higher number of attacks, higher severity of agoraphobia and worse response to treatment.

## P76

Delayed diagnosis of panic disorder

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Aim of this study is to investigate the latency between the onset of panic disorder and initiation of drug therapy.

**Methods:** We examined 52 patients suffering from panic disorder (P.D.) with or without agoraphobia according to DSM-IV criteria. The most common symptoms during P.D. attacks were palpitations, breathlessness, chest pain and intense fear of dying or going crazy. P.D. symptoms mostly caused social and occupational disruption.

**Results:** 36 patients were women and 16 men with median age 36 years. The median delay for the drug administration was 5,4 months in this study (1–96 months).

**Conclusion:** A significant delay in the diagnosis and initiation of pharmaceutical therapy of panic disorder has been observed. The most common reason was the fact that the patients visited other than psychiatrists and neurologists specialists, mainly cardiologists.

## P77

Rate of being a wife in polygamous family among married ladies with panic disorder

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**Introduction:** Panic disorder occurs in a life context, and experience plays a role in its pathogenesis and perhaps also in its etiology. Attachment theory provides a framework for the nature of interpersonal environmental influences. Polygamy is relatively common in Sistan and Baloochistan province of Iran (compare with other provinces) and some men have more than one wife (mostly two wives). The wives usually live in separated homes and polygamy means separation from husband at least every other night. In the present study we tried to examine if living in polygamous families is as important as divorce or separation in developing panic disorder.

**Materials and Method:** The study is descriptive and the sample included all married ladies who came to the OPD clinic of Zahedan Psychiatric Hospital for the first time with chief complaint of panic attacks during the 1st three months of 2003. All of them were interviewed by a psychiatrist and the diagnosis of panic disorder was established for 66 married ladies. A questionnaire which included demographic information and also a structural interview was filled for patients.

**Results:** 31 of patients were member of polygamous families, and 26 were single wives, 8 patients were widowed and 1 was divorced. The most common symptom was tachycardia.

**Discussion:** It seems that polygamy can be seen as a risk factor for mental health of women, especially in societies like Iran where, wives are accepted to be actually dependent to their husbands in many aspects of life.

## P78

Alexithymia and neuropsychological impairment in subjects with panic disorder

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Neuropsychological studies in patients with panic disorder (PD) have reported cognitive dysfunctions involving short term memory, verbal learning and visuospatial abilities, as well as more alexithymic traits than controls. In the present study, a neuropsychological and psychopathological assessment was carried out in 17 drug-free patients with PD and 19 healthy controls (HCs), matched to patients for sex, age, educational level and handedness. A test battery exploring selective and sustained attention, working and episodic memory, incidental learning and executive functions were administered to all subjects. Psychopathological assessment included the evaluation of anxiety, depression, alexithymia and of the number and severity of panic attacks. Schematic faces investigated emotional recognition. PD patients when compared with HCs showed 1) more difficulty in the identification and description of feelings on the Toronto Alexithymia Scale-20 items; 2) lower accuracy on a test exploring incidental verbal learning and more interference on a test exploring executive functions. No correlation was observed between neuropsychological and clinical indices. In line with previous studies, our data confirm that patients with PD have difficulties to distinguish bodily needs from emotional experiences. The impairment of some aspects of verbal memory and of the ability to inhibit interference suggests a dysfunction of cortico-striatal circuits originating from the orbito-frontal cortex and cingulate gyrus.

## P79

Social phobia in Israeli conscripts epidemiologic study: Prevalence of social anxiety symptoms and socio-demographic risk factors

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**Background:** Social Phobia (SP) is a highly prevalent disorder in Western countries, but is rather rare in Eastern societies. Prevalence rates range from 0.5% up to 16%. Its prevalence in Israel, an Asian state characterized by Western culture, has not yet been studied. The present study therefore aimed to assess the prevalence of SP symptomatology in a non-clinical sample of Israeli young adolescents and to characterize socio-demographic risk factors.

**Methods:** Participants included 850 young soldiers from the Israel Defense Forces (IDF). Measures included the Liebowitz Social Anxiety Scale (LSAS; self-report version) and a socio-demographic questionnaire. Clinical and demographic risk factors towards the development of SP were examined.

**Results:** Probable SP (LSAS>80) was present in 4.5% of the sample, and overall SP symptomatology was reported by a great

percentage of the subjects, as displayed by the rather high mean LSAS scores in this non-clinical sample. The following variables were accompanied by higher LSAS scores according to our regression model: receiving psychotropic medication prior to army service, perceived inability to perform command activities, shy family members, excessive absenteeism in school and not being in a romantic relationship.

**Conclusions:** This is the first epidemiological study of SP in Israel. Our findings corroborate those from other studies in the Western world, both regarding the high prevalence of SP symptoms and the risk factors and sequelae of the disorder.

## P80

Beginning of panic disorder in terms of comorbid anxiety disorders

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**Objective:** To compare the ages of beginning of panic disorder in the sample of patients with panic disorder and agoraphobia (PDA) with and without comorbid anxiety disorders (CAD), specific phobia, generalized anxiety disorder and social phobia.

**Method:** 124 consecutive outpatients with PDA participated in the study. Diagnoses of PDA and (lifetime and/or current) CAD were made on the basis of Structured Clinical Interview for DSM-IV Axis I Disorders (SCID-I). The age of beginning were defined as age when patients meet DSM-IV criteria for disorder. The ages of beginning of panic disorder of two groups of patients (with and without CAD) were compared by 2-tailed t-test.

**Results:** The comparison of patients with only one CAD and patients without CAD was not statistically significant, but patients with CAD were older at the age of beginning of panic disorder than patients without CAD (specific phobia: 31.0 vs. 30.1; generalized anxiety disorder: 31.3 vs. 29.8; social phobia: 31.2 vs. 30.5). The comparison of sample of PDA patients with jointly comorbid specific phobia, generalized anxiety disorder and social phobia and sample of PAD patients without those CAD was statistically significant ( $t=-2.36$ ;  $p=0.21$ ) and patients with CAD were older than patients without CAD (31.4 vs. 28.0).

**Conclusion:** Patients with PDA with CAD were older at the age of beginning of panic disorder than patients with PDA without CAD. This could be due to adaptation on symptoms of anxiety in patients with previous CAD and consequently later noticing of symptoms of PDA.

## P81

Use of mobile telephone during panic attack

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Anxiety disorders together with depressive disorders are one of the most frequently diagnosed disorders. In our research we have selected, from the group of patients with anxiety disorders, those meeting the criteria for panic disorders and agoraphobia with panic disorder, where panic attack represents acute phase of the disorders which must be addressed. In the file of first -time examined 72 patients (51 females/ of average age 39 years/females 41.5 years/ we have monitored and recorded number of all calls by patients to mobile phones of two psychiatrist, 24 hours a day, for 18 months. Most patients called in the first months of the therapy/26 calls/ and

in the second month-20 patients, while in the subsequent months only 2 patients called -in the third month of therapy. Patients with other disorders did not call at all. We have demonstrated that mobile phone can be a good panic tool, which enables remote management of acute anxiety disorders, without risk of addiction which could result in frequent and pointless phone calls to physicians.

## P82

The comparison of generalised anxiety disorder cases comorbid with or without alcohol dependence

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We compared 37 GAD cases to 33 GAD comorbid with alcohol dependence as to whether GAD as a result of alcohol dependence is a separate diagnostic criteria. The subjects were assessed by SCID1, PSWQ, HAM-D, HAM-A and STA-I. The both groups has got a high degree of parenting problems (43.2% and 54.5%). One third of the groups had experienced separation or loss in their childhood. The groups also had a high degree of phobias (70.3% and 54.5%) We also studied time and diagnosis continuum among cases. GAD group revealed anxiety-depression-anxiety (54.1%), anxiety alone (29.7%)or depression-anxiety (16.2%)continuum. Whilst GAD with alcohol dependence indicated alcohol-anxiety-depression (27.3%), anxiety-depression-alcohol (15.2%), anxiety-alcohol-depression (15.2%)and depression-alcohol-anxiety (12.1%) The comorbid psychiatric disorders were high; M.Depression (65.7% and 63.6%)Single Phobia (56.7% and 33.3%), Dysthymia (8.1 and 18.2), Panic Disorder (32.4% and 6.1%), Agoraphobia (27% and 6.1%). It is the fact that the only 29.7% of cases were regarded as pure GAD. The panic disorder comorbidity were statistically meaningful between the groups. Some comorbid disorders failed to show statistical difference as the number of subjects were not high enough. We also studied anxiety symptoms between the groups. It was noticed sickness and vomiting were statistically meaningful ( $p=0.024$ ). As opposed to expected, the GAD cases had more of the symptoms than GAD with alcohol dependence. Additionally, palpitation and loss of balance were statistically meaningful between the groups ( $p=0.026$  and  $p=0.047$ ), just as in fearfulness ( $p=0.0001$ ). GAD cases were again ahead.

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## P83

State anxiety after the observation period necessary to decide on whether to undergo minor surgical procedures

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**Purpose:** Our purpose was to assess state anxiety increase in patients about to undergo minor surgical procedure for urinary lithiasis.

**Population-Method:** We evaluated 112 patients (66 male and 46 female) with diagnosed urinary lithiasis, immediately after they received their diagnosis and one month later, after the end of the one month period EAU recommends to wait before deciding the indicated surgical approach. Patients had no prior history of psychiatric disorders or other stressful events during that month. State and trait anxiety were assessed using the STAI scale. Nicotine dependence was determined using Fagerstrom scale. All instruments have been standardized to use in Greek populations.

**Results:** At baseline, mean state anxiety score was 50 (+/- 4), while mean trait anxiety score was 51(+/- 4). Mean state anxiety scores at the end of waiting period was 54(+/- 6). Paired t- test showed that this increase in state anxiety is statistically significant ( $p=0,0000$ ). State anxiety at the end of watchful waiting correlates well to gender ( $p=0,01$ ), to the number of colicky pain episodes ( $p=0,0011$ ) and to the degree of nicotine dependence ( $p=0,027$ -ranksum).

**Conclusion:** During observation period, patients experience a significant increase in state anxiety scores, especially if they are of male gender, had high state or trait anxiety scores at baseline, had experienced new disease-related events. Therefore, clinicians should be more flexible, particularly when facing patients that belong in the aforementioned high risk group, because observation period sets patients under significant stress.

## P84

Different profiles of the therapeutic response in panic disorder

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**Introduction:** Comparative studies between SSRI's and high potency benzodiazepines are sparse.

**Methods:** This re-analysis is based on two previously published 8 weeks open-label naturalistic studies with alprazolam extended-release (Hrdlicka et al.,1997) and citalopram (Hrdlicka et al.,2001). The direct comparison of the data was possible, based on the two following conditions: both of the studies have been designed identically, and baseline characteristics of the study groups did not differ significantly in any characteristics as evaluated by the independent samples t-test. The re-analysis included 55 patients with an average age 35,7+10,7 years suffering from Panic Disorder or Agoraphobia with Panic Disorder. ANOVA repeated measures, with age of the patients as a covariate, was used.

**Results:** Alprazolam XR was significantly superior to citalopram in the objective global assessment as measured by CGI 1 ( $p=0,003$ ) as well as in the subjective assessment as measured by SPGIS ( $p=0,001$ ). No significant differences between medications were found in influencing the total number of episodes ( $p=0,837$ ), the number of fully expressed panic attacks ( $p=0,894$ ), nor in the number of limited symptom attacks ( $p=0,851$ ). Alprazolam XR was non-significantly more effective in reducing the time spent on being afraid of a panic attack ( $p=0,083$ ), but significantly better in reducing the intensity of the anticipatory anxiety ( $p<0,001$ ).

**Conclusions:** Our results show some different profiles of the studied drugs in alleviating symptoms of panic disorder.

## P85

Quality of life of patients suffering from anxiety disorder with co-morbid depression

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Depression and anxiety are very often seen in co-morbidity. Empirical research revealed that co-morbidity of primary anxiety disorders with severe depression reach 10-30%, and in case of primary depression and any kind of anxiety disorder co-morbidity rises over 50%. Both diseases have significant impact on patient's quality of life. The purpose of our research was to determine whether the phenomenon of anxiety disorder and depression in co-morbidity influences the quality of lives of these patients, compared to patients with an isolated anxious disorder. The sample encompassed 80 patients suffering from anxiety disorder. Experimental group consisted of subjects suffering from anxiety disorder with co-morbid depression, while the control group included patients with anxiety disorder without co-morbid depression. For assessment, we used the following questionnaires: general socio-demographic questionnaire, Beck Depression Inventory as well as WHOQoL-BRIEF assessing the quality of life in four domains (physical health, psychological health, social relationships and environment). The results point to the fact that the existence of co-morbidity of anxiety disorder with depression reduces the quality of life in all domains, especially on the level of psychological health and that the severity of depression and the level of the quality of life are inversely proportional. Co-morbidity with depression in case of anxiety disorder has far greater influence on the quality of life of females. In patients with obsessive-compulsive disorder there is an extremely high influence of co-morbidity on the quality of life. This influence is emphasized compared to general anxiety disorder and agoraphobia, where this influence is negligible.

## P86

Neuropsychological slowness in obsessive-compulsive disorder: Is it limited to tests assessing executive functions?

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Several studies reported that obsessive-compulsive (OC) patients are slower than healthy controls in performing neuropsychological tests. However, it is not clear whether this slowness is secondary to psychopathological aspects of the syndrome, such as meticolosity and intrusive thoughts, or represents a neurocognitive dysfunction. A neuropsychological battery including tests assessing executive functions and incidental learning was administered to 52 drug-free patients with DSM-IV obsessive-compulsive disorder (OCD) and 52 healthy controls, comparable with patients for age, sex, education and handedness. Each test provided independent indices of accuracy and speed. All group comparisons were carried out by multivariate analysis of variance before and after the exclusion of OC patients with a total score on the Hamilton Psychiatric Rating Scale for Depression  $\geq 16$ . Group comparison on speed indices showed that OC patients were significantly slower than controls only when performing tasks assessing executive functions (the conditional associative learning tasks and the self-ordered pointing tasks). After the exclusion of patients with depressive symptomatol-



ogy, these differences were confirmed, with the exception of the verbal version of the self-ordered pointing task. Group comparison on accuracy indices showed that OC patients performed better than controls on the spatial version of the test assessing incidental learning. After the exclusion of patients with depressive symptomatology, no group difference was observed on the accuracy indices. Our results confirm the hypothesis that neuropsychological slowness in patients with OCD represents a neurocognitive dysfunction, consisting of a hyperactivity of the executive control.

### P87

Capsulotomy for OCD and anxiety: Results from 2 long-term follow-up studies

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Capsulotomy is a neurosurgical treatment for treatment refractory OCD and is also, even more rarely, used for other anxiety disorders. The long-term effects of capsulotomy in more recently operated patient is less well known and the aim was to study the efficacy and safety of capsulotomy. We did long-term follow-up on two samples, the first with 26 patients that had undergone thermocapsulotomy for Generalized Anxiety Disorder (n=13), Panic Disorder (n=8) and Social Phobia (n=5) and the second with 26 OCD patients that had had thermo- or gammacapsulotomy. The measurements included rating scales of symptoms and global functioning, neuropsychological assessment, MRI scans and a personality inventory. Psychiatrists not involved in patient selection and postoperative treatment did ratings. Measurements of symptoms of frontal lobe dysfunction were performed. In the Anxiety group, the long-term follow-up was performed in mean 13 years postoperatively. The reduction in anxiety ratings was significant both at one-year and long-term follow-up. 67% of the patients had an anxiety rating decrease of > 50% at long-term. Seven patients were, however, rated as having significant adverse events, most prominent symptoms being apathy and dysexecutive behavior. Neuropsychological performance was significantly worse in the patients with adverse events. No common anatomic denominator could be found in responders in the analysis of MRI scans. In the OCD group, the anti-obsessive effect as measured by Y-BOCS was significant at long-term. Further data on adverse events and neuropsychology will be presented. The implications of these findings will be discussed.

### P88

Social adaptive and neurobiological indices in patients with resistant forms of anxiety-obsessive disorders at the late period after psychosurgical interventions

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Stereotaxic method was recommended by psychiatrists consultation and independent ethical commission on the basis of drug resistance

establishment of anxiety-obsessive disorders and control for disorder duration not less than 5 years. 27 patients with resistant forms of anxiety disorders (obsessive-compulsive disorders (OCD) -5 cases, organic psychic disorder - 6 cases, schizophrenia -6 cases, Tourette syndrome (TS) -10 cases) were examined at the late postoperative period after psychosurgical interventions. Social adaptation in the main life spheres was studied. The assessment of social adaptation was carried out by method of a mental state multiaxial diagnostics on the DSM 4 basis. Improvement of social adaptation was noted in all patients during the follow-up. Improvement of social adaptation in organic disorder (1.64+/-0.2 before surgery and 1.95+/-0.45 after it) and schizophrenia cases (2.03+/-0.57 before surgery and 2.47+/-0.71 after it) was less expressed (p> 0.5) than in OCD (2.03+/-0.85 before surgery and 3.43+/-0.45 after it) and TS (2.22+/-0.64 before surgery and 3.02+/-0.85 after it, p<0.01). The efficacy of stereotaxic effect was evaluated in 8 anxiety disorder cases by 18F-FDG PET. Metabolism decrease in anterior cingulate and caudate heads was noted in 7 patients. Bilateral metabolism decrease was observed in dorsal thalamus in one case. This data testify the high social adaptation level in patients with resistant psychic disorders after the neurosurgical effects. PET results confirm the participation of limbicostriatal system in anxiety disorders formation. We can assume the availability of two variants of pathogenesis OCD - biochemical failures and local 'hyperactivity' of separate neuron populations.

### P89

Double-blind comparison of escitalopram and paroxetine in the treatment of generalised anxiety disorder

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Selective serotonin reuptake inhibitors (SSRIs) are increasingly used for the treatment of generalized anxiety disorder (GAD). Escitalopram is the most selective SSRI studied to date, and has been shown in three randomised, placebo-controlled, double-blind trials to be effective and well tolerated in treating GAD. There are few studies, however, that compare the efficacy and tolerability of one SSRI to another. Patients with DSM-IV-defined GAD (baseline HAMA  $\geq$  18) received one week of single-blind placebo treatment, then randomised to 24 weeks of double-blind flexible-dose treatment with either escitalopram (10-20 mg/day) or paroxetine (20-50 mg/day), followed by a 2-week, double-blind, down-titration period. The primary efficacy variable was mean change from baseline to endpoint (LOCF) in HAM-A scores. Mean baseline HAM-A scores for the escitalopram (N=61) and paroxetine (N=62) groups were 23.7 and 23.4, respectively. Both escitalopram and paroxetine were associated with improvement in anxiety symptoms, with mean changes in HAM-A scores from baseline to endpoint of -15.3 and -13.3, respectively (p=0.13). Tolerability measures appeared to favour escitalopram over paroxetine treatment. Significantly fewer escitalopram-treated patients withdrew from the study due to adverse events compared with paroxetine treatment (6.6% vs. 22.6%; p=0.02). Of adverse events reported by  $\geq$ 20% of patients in either treatment group, diarrhoea was reported twice as frequently by escitalopram-treated patients, while ejaculation disorder, anorgasmia and decreased libido were reported at least twice as frequently by paroxetine-treated patients. These results suggest that escitalopram is as effective as paroxetine in the treatment of GAD, with a more favourable tolerability profile.

**P90**

Long-term treatment of generalised anxiety disorder with escitalopram

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Generalized anxiety disorder (GAD) is a chronic disorder requiring long-term treatment. Three 8-week, double-blind, placebo-controlled trials of escitalopram have been completed in patients with GAD (mean baseline Hamilton Anxiety Scale (HAM-A) of approximately 23). All 3 trials have shown that escitalopram is effective (based on the primary outcome measure - mean changes from baseline in HAM-A - as well as on several secondary measures) and well tolerated in the acute treatment of GAD. Patients completing these trials were given the option of entering a 24-week, open-label, flexible-dose trial of escitalopram 10-20mg/day. Efficacy assessments included HAM-A, Clinical Global Impressions (CGI), and Quality of Life (QOL) scales. Response was defined as a CGI-Improvement score of 1 or 2. Of the 526 patients who entered this open-label study, 299 (57%) completed 24 weeks of treatment with a mean baseline HAM-A score of 13.1. Long-term escitalopram treatment led to continuing improvement in all anxiety and QOL scores. Mean HAM-A scores at Week 24 for all study completers was 6.9, and 92% of completers were responders. Only 4.2% of patients were withdrawn due to insufficient therapeutic response. No tolerability concerns were associated with short- or long-term escitalopram treatment. Treatment-emergent adverse events were similar in type and frequency to those observed in the short-term GAD trials. Adverse events led to withdrawal of 9.9% of patients. No clinically notable changes in mean laboratory, vital signs or ECG values were observed. These results support the long-term tolerability and effectiveness of escitalopram in the treatment of GAD.

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## Poster Session 2: Eating Disorders

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**P91**

Ghrelin gene polymorphisms in patients with anorexia and bulimia nervosa

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Ghrelin, a recently discovered gastrointestinal peptide hormone is a potent orexigenic peptide, acting on hypothalamic neurons that are known to regulate energy balance. Plasma Ghrelin levels of patients with Anorexia Nervosa (AN) and Bulimia Nervosa (BN) are significantly higher than in controls, supporting the hypothesis of its involvement in the pathogenesis of Eating Disorders. The present study is focused to discover if alterations of Ghrelin at a genetic level could represent potential risk factors for the development of ED. The aim of our study has been to investigate the distribution of 3 different single nucleotide polymorphisms (SNPs); Glu90Leu, Leu72Met and Arg51Gln, in a large number of European patients affected by AN and BN using a combined population and family-based study. Genetic testing was performed by PCR and restriction enzyme analysis or ARMS assay for the studies SNPs. The case-

control study revealed a similar distributions of genotypes and allele frequency of the 3 SNPs in all studied groups. Small differences in the distribution of one SNP were detected in the sample of one European centre, however we lose this significance when all populations were analysed together. Family-trios analysis showed no significant differences in the transmission of Ghrelin alleles for three examined SNPs. This is the first study that investigate the possible involvement of Ghrelin in the etiology of ED across different populations. We failed to detect an association between the studied SNPs in the Ghrelin gene and AN-BN, not supporting a role for this gene as risk factors for ED.

**P92**

Cognitive event-related potentials in bulimia nervosa

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Several studies have reported neuropsychological dysfunctions in subjects with eating disorders (EDs). Main results indicated an impairment of visuospatial abilities, attention, non-effortful learning and executive control. A few investigations using Event-Related Potentials (ERPs) have been carried out in patients with EDs, focusing on the P300 component, an index of effortful processing, and showing a larger amplitude and a prolonged latency vs. healthy controls. The present study investigated ERPs in 12 bulimic patients and in 12 sex-, age- and education-matched healthy controls during a three-tone oddball paradigm, in which rare targets were randomly intermixed with rare non-target and frequent standard tones. They were analyzed by means of the 'brain electrical microstate' technique. Moreover, the relationships between topographic characteristics of ERP components and psychopathological indices in EDs were investigated. There was no difference between patients and controls on any parameter of the brain electrical microstates and no correlation in the patient group between the same parameters and psychopathological indices. These results indicate an absence of abnormalities in bulimic patients for ERP components related to attention and effortful processing.

**P93**

Treatment history and comorbidity in eating disorders

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**Background:** The present study determined the psychiatric comorbidity of axes I and II in a sample of subjects with eating disorders (ED). The objective was to investigate associations between comorbidity and current and past treatment contacts.

**Methods:** In a sample of 248 women (77 anorexia nervosa, 137 bulimia nervosa, 34 eating disorders not otherwise specified) psychiatric comorbidity axes I and II was determined with the Structured Clinical Interview for DSM-IV. Current and past treatment contacts since ED onset were also assessed.

**Results:** High levels of psychiatric comorbidity were found in the total sample (71% axis I and 68% axis II) and comorbidity was characterised by disorders of an anxious and depressive nature. Only 17% of the cases had no psychiatric comorbidity. Twenty-one percent of participants who were currently not in treatment had a history of inpatient treatment contact and an additional 59% had a

history of outpatient contact. Thirty-eight percent of participants currently in outpatient treatment had a history of inpatient treatment contact. Participants with multiple comorbidity (axes I and II) had the highest proportion of cases who had used treatment by health professionals. Higher levels of comorbidity were associated with experiences in more intense treatment settings (ranging from no treatment, outpatient, to inpatient treatment).

**Conclusion:** ED subjects with a greater extent of comorbidity may require more intense treatment. The association between comorbidity and treatment experiences could represent a bias in the assessment of comorbidity when samples with heterogeneous treatment contact history are recruited.

## P94

Attachment styles and Alexithymia in eating and panic disorders

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Previous studies investigating attachment style in subjects with eating disorders (EDs) and those with panic disorder (PD) found a poor quality of the patient/parent relationship, characterized by low care and overcontrol. Other studies investigating alexithymia found difficulties to distinguish bodily needs from emotional experiences in both groups. Fifty six subjects with an ED and 20 with PD were compared to matched healthy controls. Attachment styles were investigated by means of the Bartholomew Scale (BS), the Attachment Style Questionnaire (ASQ) and the Parental Bonding Instrument (PBI). Alexithymia was evaluated by means of the Toronto Alexithymia Scale-20 items (TAS-20). A thorough psychopathological evaluation was also carried out. The evaluation of attachment style and alexithymia in each patient groups versus controls showed: 1) a higher frequency of preoccupied and fearful attachment styles, as assessed by the BS; 2) for subjects with EDs higher scores on all dimensions of the ASQ, while for those with PD less confidence in self and others, and higher emotional involvement; 3) a perceived parental attachment pattern characterized by lower care and overcontrol only in subjects with EDs; 4) more difficulty in the identification and description of feelings on the TAS-20; 5) significant correlations between insecure attachment style, alexithymia and symptomatology. In line with previous studies we found in both patients with EDs and those with PD, a higher frequency of insecure attachment and difficulties in the identification and description of feelings. Moreover our data suggest that alexithymia might be a mediating factor between insecure attachment style and psychopathology.

## P95

The eating attitudes and behaviours among adolescents in high schools in Sarajevo

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**Objective:** The purpose of this study is to assess the prevalence of eating disordered attitudes and behaviors among adolescents in Sarajevo, Bosnia and Herzegovina, and also to identify those individuals in risk of eating disorders. Sample: A sample is made of adolescent population 14-20 years old, N= 690 (447 girls, 243 boys) from randomly picked high schools in Sarajevo.

**Method:** A sample of adolescents was screened with a Bosnian translation of Eating Attitudes Test (BhEAT- 26) and Body image scale, and the questions about weight and height, exercise behaviour, self-induced vomiting, abuse of laxatives, bingeing, suicidal tendencies and menstrual cycle for girls. Individuals who screened positively (20 and above) were further evaluated with clinical interview.

**Results:** 18,1% of this sample of adolescents are displaced persons and 21% of adolescents live with one parent. The results of BhEAT- 26 cut-off score: girls 26,7%; boys 4,1%. Comparing the two groups of adolescents, results show that adolescents with higher scores on Bh EAT-26 have worse school success, lower educational status of parents, and lower level of employment among their parents. Bingeing is common among adolescents in Sarajevo (13,5%). Self-induced vomiting is less common (1,2%), and the use of diet pills and laxatives is rare (0,7%), but most of them exercise to control their weight (24,5%).

**Conclusion:** Body dissatisfaction, dieting behaviour and excessive exercises are very common in this population. These results are similar to the reports in Western countries. Key words: eating disorders, adolescents, attitudes, EAT-26.

## P96

Personal life story by patients with anorexia nervosa, restrictive type: A dynamic analysis

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Anorexia nervosa seems to take root more easily in a context of rigid patterns of family interaction. Such patterns can become apparent through the patient's autobiographic speech. In a psychopathology perspective, narrative processes have been traditionally tackled by an analysis of their symbolic content, ignoring other important aspects like the temporal organization of the narrative components. However, a large body of evidence now support the view that speech can be considered as a dynamic self-organized phenomenon, characterized by a specific temporal organization. Our study aimed therefore to determine (i) whether anorectic patients' speech comprises specific narrative components, (ii) whether these narrative components are temporally organized accordingly to a more rigid way than observed in a control sample. Different aspects of the content of the life stories of 14 adolescent girls with anorexia nervosa, restrictive type (themes, emotions, use of personal pronouns) were coded and compared to those of 14 healthy adolescent girls. Speech analysis was performed using both classical and dynamic methods. Quantitative aspects of the speech were assessed by means of entropy indices and transition matrix. Our results show a greater stability of the temporal arrangement of the different linguistic indices observed in the life stories of the anorectic patients vs. healthy adolescents. This gives support to the existence of a specific temporal organization of the life story in the anorectic adolescent. The characteristics of this speech organization can be interpreted as the expression of the internalization of rigid family patterns.

**P97**

Psychodynamic management of the motivational path in patients with eating disorders

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**Introduction:** Eating disorders, particularly anorexia (DSM IV), are characterized by a poor insight, both as consciousness of the disease and as knowledge of the psychopathological devices lying below. In the best case possible, the request of intervention is focused on the symptom. This aspect influences negatively the practicability of psychotherapeutic interventions with analytical mark, oriented towards structural changes which we believe to assure more results for a long time. At first, the consulting-room for eating disorders at the Psychiatric Department in Ancona used this methodology to shift the scales of the 'motivational balance' in behalf of a good disposition to change. The groups were guided with a cognitive technique, leaving a wide space to the information which strengthened the phantom of omnipotence of the disease, and supported the identification with these negative and omnipotent parts. Neither the insight nor the defensive order were modified.

**Methods:** Therefore, we have started 'motivational groups' aimed not at increasing the consciousness about the possible consequences of the pathological eating behaviour, but at the emotional involvement, at starting a containing relationship which could allow to slacken the defensive devices, at mobilizing deep instances oriented towards a change. Results. We will discuss the first results which, even without letting overcome the ambivalence that is part of the request of treatment, seem to be more reliable in leaning towards an effective therapeutic alliance and in a certain permeability and plasticity about the interpretative interventions.

**P98**

Treatment of binge eating disorder with sertraline: A randomised controlled trial

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Binge Eating Disorder (BED) is one of the most frequent eating disorders in industrialized societies. Reduced serotonin activity has been suggested to trigger some of the cognitive and mood disturbances associated with BN. Therefore, pharmacological treatment of BED is mainly based on the use of selective serotonin reuptake inhibitors, that have proved effective. At the present, the biological bases of this disorder are not yet completely clear. The aim of this randomized, controlled trial was to verify the efficacy of sertraline, a selective serotonin reuptake inhibitor, in a group of patients with a diagnosis of BED. The study included 20 female patients, aged between 24 and 36 years old, who suffered of BED-binge purging as defined by the DSM IV and the BITE scale's diagnostic criteria. The patients, under previous consent, were randomly divided into two groups of 10 women each. The patients in the first group were given 100 mg/day of sertraline for 12 weeks. The patients in the second group were given placebo. The study went on for 12 weeks. At the

end of the 12 weeks of treatment, the sertraline-treated group showed a 65% decrement of the binge eating crisis, a 56% decrease of the purging behaviours and a 7% decrease of caloric intake with a strong reduction in the glicide rate. The patients lost about 5% of their weight. The placebo-treated group showed no significant changes. This study confirms that sertraline is well tolerated and effective in reducing binge-eating crises and purging in patients with BED

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## Poster Session 2: Psychosomatic Disorders and Liaison Psychiatry

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**P99**

Cognitive function evaluation in haemodialysis patients: The role of anaemia

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Manifestations of altered mental status in uremia are reversible with the initiation of dialysis. Still, subclinical disturbances of cognitive function are possible in apparently adequately treated patients. The use of recombinant human erythropoietin (EPO) made us realize that some of the disturbances may be partially due to associated anemia. Twenty-five patients (10F,15M) aged 32 to 69 years on hemodialysis for 85.7±88.7 months were enrolled and their hemoglobin (Hb), hematocrit (Hct), cholesterol, triglyceride, glucose and parathormone levels were measured. They were nondiabetics, free of intercurrent complications, with normal hepatic function, good BP control, acceptable dialysis prescription, without vascular disease and history of psychiatric disorders. KT/V was used for assessment of hemodialysis adequacy and Mini-Mental State Examination (MMSE) for the evaluation and grading of cognitive state. Patients were divided into 3 groups according to the duration of hemodialysis (months): group I (8 pts) < 42, group II (9) 42-84 and group III (8) > 84. Also, results obtained from 10 patients treated with EPO (Recormon®) who achieved recommended Hb target by European Best Practice Guidelines, were compared to nonEPO group (N=15). None of the parameters (laboratory values, age and MMSE scores) were significantly different among groups with respect to length of hemodialysis. Overall, test results were 27.8 ± 1.66 points, the most problematic being attention and calculation part of the Questionnaire. Between-group differences favoring EPO over nonEPO were higher Hct (p<0.01), Hb (p<0.01) and MMSE score (p<0.01) indicating that anemia correction is related to improvement in cognitive function. This merits further study.

**P100**

Anxiety/depressive symptoms and personality traits in patients treated due to leukaemia and lymphoma

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**Background:** Haematological treatment is associated with excessive distress due to side effects of cytostatics and due to severe life consequences of the illness. It could be a cause of anxiety or depressive states in vulnerable persons.

**Aim:** The purpose of the study was to determine relation between personality traits, distress and severity of depressive/anxiety symptoms among patients treated due to leukaemia and lymphoma.

**Methods:** 45 patients with leukaemia or lymphoma, 29 treated due to other internal diseases and 28 healthy persons were assessed. The following research instruments were used: the Eysenck Personality Questionnaire (EPQ-R), the General Health Questionnaire (GHQ-30), criteria scales (ICD-10) for depression and anxiety.

**Results:** The two groups of patients differed significantly from control group in scores of depression and distress (GHQ). Differences in anxiety level and neuroticism were not relevant statistically. Similar in all the groups score of neuroticism highly correlated with depression and anxiety scores in the groups of haematological patients (Pearson product-moment correlation  $r = 0.59$  and  $0.58$ ), and in the groups of other internal patients ( $r = 0.60$  and  $0.61$ ) but not in the control group ( $r = -0.3$  and  $0.17$ ).

**Conclusion:** Neuroticism score is the measure of stable personality trait and is not close related to symptoms. Its level is similar in all the groups. So neuroticism score could be a predictor of depressive and anxiety states caused by stress in the course of internal illnesses.

## P101

Depression in leukaemic patients in pre-BMT period of the disease. Prospective study. Preliminary data

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**Methods:** 59 acute leukemic patients, age 16-65, who received 1st line chemotherapy were evaluated in 1 year prospective study. The Beck Depression Inventory, Hamilton Depression Rating Scale, Hopelessness Scale, were administrated month 1st, 2nd and 3rd respectively. We evaluated also Sense of Coherence (Questionnaire SOC-29, A. Antonovsky) after 1st cycle and after next three months of chemotherapy. Population were divided in three groups, i.e. severely depressed, moderately depressed, non depressed (according to ICD-10). In groups: type of leukemia, haematological risk factors, type of chemotherapy, time to complete haematological remission, days of neutropenia, scores in WHO-scale of adverse events of chemotherapy, pain, usage of extraordinary procedures, psychiatric drug administrations, time to relapse, administration of BMT procedure were studied.

**Results:** 44 patients completed the study. 1. Depression was independent of type of leukemia, type and adverse events of chemotherapy. 2. Clinically significant depression in first three months of chemotherapy was not a predicting factor for: complete haematological remission, relapse after first line successful treatment, patients enrolling into bone marrow transplantation group in next steps of the haematological treatment. 3. There was no statistically significant difference in survival after one year, between depressed and non-depressed groups, but we observed positive, but statistically non-significant trend for non depressed group. 4. Sense of coherence was significant higher ( $p < 0.05$ ) in all evaluated groups than in general polish population. 5. Sense of coherence was significantly higher ( $p < 0.05$ ) in non-depressed group than in depressed patients, and seems to be a possible predictor of depression in leukemic patients.

## P102

Psychiatric disorders and survival in lung transplant

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**Objectives:** Study the relationship between psychiatric disorders and survival in patients with lung transplant.

**Subjects and Methods:** 64 consecutive candidates for lung transplant (49 of which were transplanted) were evaluated in the psychiatric service. They underwent a psychiatric interview according to ICD-10 criteria in which we evaluated current psychopathology and past psychiatric disorders including present or past presence of substance abuse. We also assessed the social and familial support, treatment compliance, previous adaptation to stress, transplant expectations and disease endurance according to an ad hoc designed scale. The length of time patients spent in waiting list and survival were registered as well.

**Results:** The long life prevalence of psychiatric disorder was 48,4%. From these patients 34,1% had an adaptative disorder, 26,8% depressive disorder, 24,3% anxiety disorders and 9,7% alcohol dependence. The median for global survival was 46,8 months (CI 22,2;71,3). No statistical significant differences in survival were found in patients with a history of mental disorders ( $p=0,52$ ) or patients with a mental disorder in the moment of evaluation ( $p=0,69$ ). No significant differences in survival were found with the length of time patients were on the waiting list either ( $p=0,58$ ).

**Conclusions:** Despite the high prevalence of psychiatric disorders found in the sample no association with survival after lung transplant has been found. A previous study shows also this fact.

## P103

Anxiety, depression and somatization

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Somatization of affective disorders, such as anxiety and depression, becomes phenomenon which acquires not only diagnostic and therapeutic difficulties of clinical psychiatry but also problem of general medicine, especially in the some regions of the world like African and Asian regions. At the same time, phenomenon of somatization opens new possibilities for studying of correlation of anxiety with depression as in clinical aspect so in neurobiological aspect. The strategy change of the therapy of anxiety disorders with orientation from anxiolytics to antidepressants allow to suppose not only co-morbidity of these disorders but more complicated and heterogeneous biological underlying mechanisms. Acceptably to suppose that in some variants of the correlation of anxiety and depression they are not only comorbid but also concerned with pathogenesis where primary anxiety transforms later into depression, which fulfills the role of original mechanism of psychological defense. The appeal for help is more typical for anxiety than for depression, but the more somatized anxiety the more this appeal may combine with syndrome of negation of psychological factor. It is possible to suppose that phenomenon of somatization is very heterogeneous and there are psychological mechanism (alek-sytemiya), the particularities of cognitive styles, ethno and cultural mechanism, the fear of stigma and domination of vegetative com-

ponent over psychological component in it. The somatized affective disorders become one of the main zones of studying and classified orientation.

### P104

Mood disorders among 350 patients hospitalized for a somatic affection: A prospective analysis

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Depression constitutes by its frequency and its consequences as well individual as on the level of the population a major stake of public health. The prevalence whole life approaches the 20% in general population and would largely exceed this figure among patients hospitalized for a somatic affection. Half of the 13000 suicides and the 120000 attempts listed each year in France would occur in a context of depression. It appears that this pathology is insufficiently diagnosed and treatment remains often inadequate. The aim of this prospective study was to evaluate the frequency of depression among patients hospitalized in the medical services of the university hospital of Besançon. The analysis relates to the first 350 patients included in the study. The subjects were questioned in a standardized way using MINI questionnaire, with collection of the treatments and the socio-demographic data. The depressed patients were evaluated using Hamilton depression rating scale and the short scale of anxiety. On the 350 subjects included in the study and of which the data are complete, 129 have a depression whose 59 receive an antidepressant treatment. On the whole of depressive patients, 42 subjects presented a major depressive episode evolving for at least 14 days and among them, 25 did not receive a specific care. These first results tend to confirm the importance of depression at the somatic patients and the remaining efforts to improve treatments. This work is financed by a Hospital Clinical Research Program (PHRC).

### P105

Association of allergy and psychiatric disorders in the community

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**Objectives:** High rates of psychiatric morbidity have been observed in various groups of allergic patients. In the present study we studied the connections between allergy and psychiatric disorders in the general population.

**Methods:** In the 'HUNGAROSTUDY 2002' health survey 12570 persons, representing the adult Hungarian population according to age, sex and county, were interviewed. Data on actual and past medical treatments were collected. Prevalence of panic disorder, depression and other psychiatric disorders was studied in association with allergic diseases (asthma, hay fever, allergic skin symptoms, food allergy and other allergies).

**Results:** 19.7% of the sample was treated for allergies, and 8.9% of the population sample reported any psychiatric treatment. In the allergy group, the rate of psychiatric disorders (most frequently depression and panic disorder) was 13.6%, compared to 7.6% if no allergies; this indicates a twofold risk (OR 1.9; 95% CI 1.7-2.2).

According to allergy type, the lowest OR was 1.7 for allergic rhinitis and the highest 2.6 for food allergy. The association between allergy and psychiatric morbidity was stronger in men than in women (OR 2.16 vs. 1.68), and the OR also increased with age. Allergic disorders were more prevalent in persons treated for psychiatric disorders as well, the association was the strongest for panic disorder (OR 2.27).

**Conclusions:** People with some allergic disorders are at higher risk of psychiatric morbidity than non-allergic people. Our data support the hypothesis that some common biological predisposition may play a role in the frequent association of the two disorders.

### P106

Psychotic expressions in multiple sclerosis

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**Background-Objective:** Psychotic expressions rarely appear in multiple sclerosis. Undoubtedly it is difficult to verify if the demyelinating foci are the reason or multiple sclerosis was observed in patients who had psychotic symptoms. Psychosis appear especially often in the encephalic forms of multiple sclerosis. In the present study the cases of patients who suffered from multiple sclerosis and had psychotic symptoms, anxiety, delusions etc. are described.

**Material-Subjects:** The sample of the study was comprised of 22 subjects (16 females and 6 males). The mean age was 34,5 (min 21, max 42). During the treatment, and after three years, three patients showed positive and negative psychosomatic symptoms. The two women were 23 and 27 years old respectively, and the man 31 years old. These cases are analyzed in details even with MRI.

**Results:** They had the following symptoms: Paranoid symptomatology, the man had auditory hallucinations. One woman appeared maniac symptoms. The other woman had depression, believing that she followed and thus, her life was in danger. In all three patients the plaques were limited around the ventricular and to the left temporal area.

**Conclusions:** Our views are expressed concerning the possible reason of the psychotic symptomatology in the cases of multiple sclerosis. We took seriously under consideration the psychotic events that appear after the treatment with Cortisone. We found, yet, necessary the reference to possible comorbidity. We compared our conclusions with of international literature and we underline our conclusions.

### P107

Immunological aspects of depression in multiple sclerosis patients

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Neuroimmune interactions allow us to assume the involvement of immunological mechanisms in development of mental pathology. In order to investigate the involvement of immunological mechanisms to the development of depression disorders in multiple sclerosis patients, we have examined the quantity of immunocompetent cells in peripheral blood and their functional activities (spontaneous and mitogen-induced proliferation, production of IL-1, IL-6, TNF- $\alpha$ , IL-4 in vitro, cytokine's genes expression). The level of depres-

sion disorders evaluated by using of MADRS, HARS, BDI, SCL-90. Multiple sclerosis patients with the progressive form of disease but without depression constitute the control group. The examined group consists of patients with the progressive form of disease accompanied by depression disorders. It was revealed, that the frequency of depression in patients with the progressive form of multiple sclerosis is 87,5%. Established differences in the content of CD3, CD4 CD8, CD16 lymphocyte's subpopulations and their proliferative activity were not revealed. The spontaneous and mitogen-induced production of IL-1 and TNF- $\alpha$  in patients with depression exceeded the appropriate parameters in the control group, whereas the level of IL-4 and IL-6 was the same as that of the control group. The received data testify to the involvement of IL-1 and TNF- $\alpha$  in development of depression in multiple sclerosis patients.

### P108

Multiple sclerosis (MS) in the syndrome of paroxetine abstinence

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**Background:** An acute diagnostic problem is the sudden vertigo to MS patients. In an early stage one can think of a new deterioration. It could also have been an abstinence to a rough pause of Paroxetine treatment.

**Methods:** In cases of 6 women and 3 men MS with an average duration of the disease 8.5 +/- 4.5 years, and at the same time Paroxetine treatment for more than a year due to depressive reaction, symptoms of a very powerful rough vertigo along with sleep, appeared to everyone after a dose interruption. The interrupted dose was more than 40mg per day.

**Results:** To 5 of the patients worse results of evoked potentials were recorded. After a return to the previous dose, there was an instant re-development of the clinical symptoms simultaneously with the evoked potentials, to the past state.

**Conclusion:** Paroxetine causes to the MS abstinence with an alteration of the evoked potentials.

### P109

Features of depressive disorders at Multiple sclerosis patients

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Early invalidity of patients with a multiple sclerosis frequently caused not only neurological deficiency, but also difficulties of social and psychological adaptation, that substantially aggravated with infringement of the supreme cortex functions and behavioral problems. The depressive reactions have significant role in infringement psychemotional status at patients with a multiple sclerosis. Depression conducts to failure of adaptable mechanisms, infringements of functions of bodies and systems. The purpose of the present work was to study features of displays of depression at patients with a multiple sclerosis. For unbiased estimation of the anxiety and depression symptoms we used the depression scale of Montgomery-Asberg (MADRS), Hamilton (HARS.) For the estimation of subjective symptoms we used the Beck inventory (BDI), clinical symptoms - SCL-90. It was revealed, that already in early stages of disease the symptoms of depression were accompanied by

more expressed infringement of cognitive functions as deterioration of short-term verbal and a visual memory, reduction of active attention, difficulties of conceptual thinking, in comparison with symptoms of depression at other somatic diseases, in particular, at arterial hypertension. The interrelation is revealed by expressiveness of symptoms of depression and activity of disease. Realization of pathogenesis - based therapy of a multiple sclerosis without using of antidepressants resulted in decrease of expressiveness of symptoms of depression that confirms somatogenic character of depressive frustration at a multiple sclerosis.

### P110

Prescribing antidepressants to epileptic patients

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Epilepsy and some anticonvulsive treatments are risk factors for depression. Depression is a risk factor for epilepsy. In epileptic patients, the treatment of depression has the potential to improve seizure control by indirect mechanisms, e.g., better sleep and enhanced compliance to anticonvulsive treatments. Some antidepressants might also induce or aggravate seizures; this risk is dose-dependent. In pharmacovigilance databases and in the medical literature, the higher incidences of iatrogenic seizures are attributed to antidepressants such as bupropion, maprotiline, and clomipramine. Hence, these drugs should not be prescribed in epilepsy. Tricyclic antidepressants (TCAs) other than clomipramine have a curious dual effect on seizures. TCAs have a well-demonstrated concentration-dependent seizure risk. However, TCAs also have a less-known anticonvulsive effect, demonstrated in human and animal models, under usual or low TCA concentrations. Despite of this favorable effect on seizure control, we emphasize that TCAs are dangerous for epileptic patients. An intermediate proconvulsive risk is attributed to mianserin. Mirtazapine is an antidepressant similar to mianserin, but there are very few reports of seizures attributed to mirtazapine. The safer choices regarding the seizure potential are the selective serotonin reuptake inhibitors (SSRIs) and the reversible monoamine oxidase inhibitor (MAOI), moclobemide. They are recommended as first-choice treatments of depression in epileptic patients. When choosing an antidepressant drug for an epileptic patient, one should also consider the potential pharmacokinetic interactions between antidepressants and anticonvulsive drugs.

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### P111

Clinical study of the correlation between depression and diabetes mellitus

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The appropriate management of chronic diseases is important to ensure a high quality of life. In particular, depression has been reported to occasionally accompany diabetes mellitus. Here, we investigated depression onset in individuals with diabetes mellitus. Subjects were outpatients with a clinical diagnosis of depression in combination with diabetes mellitus between August 1, 1998 and September 30, 1998 of the psychiatry clinic of Jichi Medical School. Of 34 individuals (20 males, 14 females) included in the

preliminary investigation, 22 were interviewed. We investigated the social demographic background, the treatment, family history of depression and diabetes mellitus, and measured the Hamilton's Rating Scale for Depression and the value of HbA1c. The overall male/female ratio was 13/9, indicating that this pattern of disease onset was more common in males than in females. The Hamilton's Rating Scale for Depression correlated closely with the percentage of patients being treated with insulin. Furthermore, the timing of the diagnosis of these two diseases correlated closely with each other. The ratio of males to females suggested that the different gender roles and lifestyles and the biological bases of these differences may play roles in the onset of depression among diabetic patients. Moreover, as more patients with insulin dependence developed depression than patients without insulin, insulin was implicated in the onset of depression. Furthermore, as the onset of the two diseases correlated closely with one another, the onset of one disease may have hastened the onset of the other.

### P112

Behavioural changes in patients of infectious diseases hospital: Current problems of management and investigations in Ukraine

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**Objective:** The problem of mental disorders in patients of infectious diseases hospital (IDH) is universally recognized. Our article summarizes current situation with psychiatric interventions for these disorders in Ukraine. Behavioral changes in patients of IDH are significant clinical problem, which had been investigated insufficiently. Lately psychotic states of infective genesis are rarely observed, and a wide range of non-psychotic disturbances is in the foreground. The problem is that even mild forms of behavioral changes, despite of their transience, often cause therapeutic difficulties. Psychopathological manifestations are associated with patients' attitude toward the disease. Fears because of contagious character of disease and neurotic reactions are common. However, underestimation of disease severity, rejection of diagnostic procedures and medications, infringement of therapeutic regime are also frequently met by therapists. In all cases of patients' inadequate perception of disease there is a risk of disruption of therapy. So far, however, these problems are considered insignificant by medical staff of IDH. At the same time psychiatric experience in this field is virtually absent, because psychiatric consultations in IDH are restricted to urgent intervention for psychotic patients, and there is no foundations for routine consultative work. Thus, slightly expressed behavioral changes are out of attention. Nowadays adequate solution of these problems is impossible without operational system of liaison psychiatry. In our opinion, psychiatrist must be integrated into the staff of IDH. Besides, scientific investigations in this field, which formerly were not numerous, must be directed by unified methodological approach and oriented toward the momentary needs of IDH.

### P113

QT prolongation among psychiatric patients: Four cases report

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Over the past ten years, it has been clearly established that cardiovascular mortality is higher among psychiatric patients than in the population at large. Indeed, many psychotropic drugs are associated with QT interval prolongation which can lead to torsades de pointes and fatal ventricular arrhythmias. The authors report four cases of significant QT prolongation among psychiatric patients in different circumstances: three of them were associated with a second-generation antipsychotic; risk factors include overdosage, bradycardia and the associated use of phenothiazines. The fourth case was a diuretic overdose associated with hypokaliemia and bradycardia. As a consequence, it is imperative for clinicians to be familiar with knowledgeable of the risk factors for QT prolongation, especially when prescribing treatment includes antipsychotic drugs.

### P114

Risk factors for QT interval prolongation: Data from 350 patients hospitalised in a psychiatric unit

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Risk factors for QT prolongation were examined in a cohort of 350 patients hospitalized in a psychiatric unit. This survey is meant to evaluate how many patients present risk factors for QT prolongation. It is interesting to note that many patients were exposed: hypokaliemia was found in 10% of the patients; hypokaliemia is one of the major causes of QT lengthening. Bradycardia was found in 5% of the patients. The other risk factors were examined. In the same way, the survey highlights the fact that antipsychotic drugs were prescribed in association with inadvised or contradicted drugs in 19% of the patients. These data tend to indicate that risk factor for QT interval prolongation have to be known by practitioners: there is a risk of torsades de pointes and lethal ventricular arrhythmia during periods of QT prolongation especially if patients are treated by antipsychotic drugs.

### P115

Depressive disorders in arterial hypertension patients in different level of sodium-lithium countertransport in erythrocyte membrane

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Depression is one of the important factors affecting the development of arterial hypertension (AH). The data received prove the great significance of membrane disorders (determined by the sodium-lithium countertransport rate (SLCR) in AH etiology. SLCR is genetically determined (GD).

**Aim:** To study the depressive disorders (DD) in AH patients in GD groups.

**Methods:** 128 female with AH (mean age 48,0±0,3) were examined. SLCR was determined according to Canessa M. To assess the psychic state of AH patients the clinical psychopathological method was used. To study the whole scale of SLCR quartile distribution in population was used. Quartile borders (mmol Li/L RBC/h) are: I - 78-193, II - 194-265, III - 266-342, IV - 343-730. In 4 obtained groups-quartiles the patients' psychic state was studied.

**Results:** In the first quartile (n=24) there were 5 (20,8%) women with DD, asthenic depressive syndrome of average degree of sever-



ity (DS) prevailed. In the second quartile (n=28) there were 19 (67.9%) women with DD combined with anxiety and obsessive phobic disturbances of heavy DS. In the third quartile (n=32) in 10 (31.3%) women DD were combined with asthenic and vegetative disturbances of average DS. In the fourth quartile (n=44) there were 29 (65.9%) women with DD with sprinkles of anxious, hypochondric, vegetative and phobic disorder.

**Conclusion:** DD are revealed in women with AH in all the quartiles of SLCR. There is bimodal distribution of DD frequency. Psychic state of patients in GD groups is characterized by differences as to the frequency and structure of depressive disorders.

### P116

Diagnostics and treatment of affective disorders in patients with arterial hypertension

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The aim of our study was to recognize affective disorders in patients with arterial hypertension (AH) and to find out whether a complex therapy (combined with one of the two antidepressants: tianeptin or sertraline) is effective in this group. 106 patients with moderate AH have been studied with ECG, echocardiography, 24 hours Blood Pressure Monitoring (BPM) and psychopathological examination including screening questionnaire, clinical scales HDRS, HARS and SCL-90. Clinically significant affective disorders have been revealed in 60.4% of all patients. The patients with AH and comorbid disorders were divided into two subgroups: one subgroup was treated by antidepressants, another subgroup received only ASE inhibitors and beta-blockers. The patients treated by the complex therapy, showed clear signs of clinical improvement: reduction of affective disorder symptoms and significant reduction of HDRS, HARS and SCL-90 parameters. In patients who took antidepressants we observed improvement of cardiac haemodynamics, structure and geometry of the left ventricle (LV), clinical status and 24-hours BP-profile. Any negative influence of antidepressants on regional contractility and LV relaxation didn't reveal.

### P117

Characteristic of level of anxiety and emotional control in patients with coronary heart disease, who are Type A behaviour pattern

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The aim of study is an assessment of dependence between intensity of symptoms characterised Type A behavior (life under time pressure, competition, aggression and enmity), indications of emotional control formulated by Brzezinski and anxiety in conception of Spielberger. This study consists of patients (man), who were treated in Department of Cardiac Rehabilitation, National Institute of Cardiology in Warsaw, with coronary heart disease, after first heart infarction and PTCA or CAB (by-pass operation). According to medical criterion all patients belong to the first group of NYHA. Methods used in investigation: 1. Questionnaire of Emotional Control - J. Brzezinski 2. State- Trait Personality Inventory - C. D. Spielberger 3. Jenkins Activity Survey - C. D. Jenkins, R.H. Rosenman, S. J. Zyzansky Twice were examined 50 men with coronary heart disease, after heart infarction and PTCA or by-pass operation (CAB) different on score of Type A behavior. Examined patients

were described as people with Type A or B behavior using JAS Questionnaire.

**Results:** There are strong correlation between results of Questionnaire of Emotional Control and STPI Questionnaire among patients with Type A and B behavior in the first research. In the second one exists the same correlation especially in group of patients characterized as people with Type B behavior. During one-year investigation attitudes of Behavior Type were constant features.

**Conclusion:** Type A behavior coexists with specifically features of attitudes of emotional control among patients with coronary heart disease. This pattern of behavior is manifested by attitudes of emotional reactivity - impulsiveness, difficulty with emotional control.

### P118

The effects of therapeutic touch on anxiety and cardiac dysrhythmia in cardiac catheterization clients

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This research is a quasi-experimental study that was performed in a Tehran hospital. The purpose of this study was to determine the effect of therapeutic touch on anxiety, vital signs and cardiac dysrhythmia in cardiac catheterization female clients. The non random sample consisted of 71 subjects, that case 3 was omitted for some reason. 68 clients were randomly assigned to: experimental (26), placebo (21) and control group (21). Experimental group received therapeutic touch for 10-15 minutes (one hour before catheterization). Placebo group received mimic therapeutic touch (without centering or intent to help) and control group did not receive any therapy. Basic data collected by Spielberger anxiety test, check list of cardiac dysrhythmia and paper of record vital signs before and during catheterization. Analysis of data was computerized adopting SPSS package software. Finding of this study indicated: therapeutic touch caused a reduction in the state of anxiety ( $p=0.000$ ), no effect on trait anxiety. In addition, therapeutic touch was effective on systolic blood pressure ( $p=0.002$ ), pulse rate ( $p=0.000$ ) and respiratory rate ( $p=0.0014$ ) during catheterization and effective on cardiac dysrhythmia only on sinus tachycardia ( $p=0.005$ ). Results suggest this method is effective on anxiety in stressful situations.

### P119

Evaluation of anxiety and hostility levels with patients after coronary artery bypass graft (CABG) - characterised by A and B type behaviour pattern in the course of six month cardiac rehabilitation

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**Aim of study:** An attempt to evaluate levels of anxiety, hostility and inquisitiveness with patients after CABG, characterized by the type A behaviour, in the early phase of cardiac rehabilitation and six months after. Material: 78 males (aged 31-63;  $x=50.8$ ) - 39 characterized by type A behaviour (group A); 39 - by type B (group B).

**Methods:** 1. JAS - Jenkins and co-authors - to estimate type A behaviour. 2. TPI - Spielberger - the level of hostility and inquisitiveness. The patients were examined twice, during the hospitalization and six months after CABG.

**Results:** At the beginning: no significant differences in anxiety level between groups, everybody had high anxiety level. However patients in group A had higher hostility than group B. Within patients showing the type B there was a higher level of inquisitiveness. Six months after: major decrease of anxiety level observed in group B. There was a slight decrease among patients in group A as far as anxiety level is concerned, the hostility stayed on the same level. In both groups the inquisitiveness raised significantly.

**Conclusions:** 1. Among all patients (irrespective of the behaviour type), bypass causes high level of anxiety. 2. In stress situation (CABG), patients with type A behaviour show higher hostility - for group B inquisitiveness level increase is typical. 3. Rehabilitation can significantly lower the anxiety level in the B group. 4. It is recommended that there is an independent rehabilitation program introduced (concerning psychological issues) for patients with type A behaviour

### P120

Evaluation of depression symptoms, anxiety level and emotional control with patients after coronary artery bypass graft (CABG). At the beginning and the end of early phase of cardiac rehabilitation and over three months after the surgery

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**Aim of study:** An attempt to evaluate the variation of anxiety exacerbation and emotional control with patients after CABG, during early hospital rehabilitation and three months after the surgery. Material: 101 patients (aged 39–79;  $x=65,3$ ) after CABG, hospitalized at Cardiac Rehabilitation Clinic.

**Methods:** 1. Beck Depression Inventory; 2. STAI – Spielberger; 3. KKE- Brzezinski to evaluate emotional control. The patients were examined three times: on the first and the second day of their hospitalization and three months after.

**Results:** The examination at the beginning of rehabilitation showed low and medium depression level (30% of patients). In the next examination (after the rehabilitation) a slight decrease of depression symptoms (up to 25%). In three months after the CABG the level of depression symptoms decreased to 17% in the examined subjects. The differences in the exacerbation of depression symptoms between the first and the second examination were significant  $p<0,05$ ; between the second and the third examination:  $p<0,25$ . The differences in depression exacerbation immediately after the surgery and three months later were significant at  $p<0,0001$ . In anxiety level significant statistic differences were between the first and the third examination: ( $p<0,05$ ). In terms of emotional control, the only significant statistic differences were with the scale of situational control  $p<0,1$  (between the 1st and the 3rd examination:  $t=1,215$ ; between the 2nd and the 3rd:  $t=1,383$ ).

**Conclusions:** 1. Rehabilitation significantly lowers depression symptoms as well as anxiety level experienced by the examined subjects. 2. The control of situation increases during hospitalization; decreases three months later.

### P121

Psychological analysis of emotional reactivity and quality-of-life in patients after heart transplantation

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**Aim of study:** The authors presented data concerning correlation between self image, emotionality measures and measures of emotionality quality of life in patients before and after heart transplantation. Material and methods: 35 men (aged 25–71 years,  $x=50$ ) after heart transplantation were included in our study. The set of methods was used for the evaluation of psychological parameters:

1. Questionnaire of Emotional Control - (J. Brzezinski);
2. Adjective Check List - (H.G. Gough, A. B. Heilbrun);
3. Quality of Life Inventory - (J. Tylka).

**Results:** The level of activity of persons before transplantation was highly correlated with their needs (e.g. dominance, self-confidence, achievement). High level of activity (before and after heart transplantation) was strictly connected with: vital energy locus of control measures ( $r=-0.613$ ), personality, dominance ( $r=0.577$ ) The patients presented after heart transplantation expressed high level of happiness, manifested in strong self-confidence and affiliation.

### Conclusion:

1. Heart transplantation influences the up psychological status of investigated subjects
2. The results of self-image and emotionality tests are correlated are with quality of life indicators in patients after heart transplantation.

### P122

Systemic psychotherapy in chronic pain patients

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In the Psychotherapy Unit of a general hospital we followed Dialectic- Systemic Psychotherapeutic approach, as developed in the Athenian Institute of Anthropos, meeting predominantly with couples and families of patients facing chronic pain problems, using pharmacotherapy only when necessary. Purpose: Our purpose was to assess the effectiveness of systemic therapy in chronic pain management. Population-Method: Fifty three randomly selected patients with unsatisfactory response to pain reducing schedules attending a chronic Pain Clinic were referred for systemic psychotherapy to the same therapists. Therapy's effectiveness was assessed using a visual analogue scale.

**Results:** A satisfactory 64.2% of the referred patients (34) came for psychotherapy. Patients that refused to go into therapy (19) were used as a control group, along with a second group of matched pain patients (53) not referred for psychotherapy. Of the 34 patients that agreed to follow systemic therapy, depressive symptoms were present to 22 patients (25.5%). Psychotropic medications were prescribed to 8 patients (25.5%). Six months after the end of therapy, 2 patients (5.9%) reported worsening of pain, 6 (18.2%) reported no improvement or minor improvement, 9 (26.5%) reported average improvement and 16 (49.2%) reported great improvement. More patients submitted to systemic therapy reported average or major improvement, compared to controls not referred for psychotherapy ( $x^2=4.23$ ,  $p<0.5$ ), while  $x^2$  for controls that declined psychotherapy did not reach statistical significance, probably due to the relatively small number of those patients.

**Conclusions:** Preventive systemic approach interventions may contribute to suffering reduction in chronic pain problems.

**P123**

Analgesic effect of trazodone in neoplasm associated pain

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**Background:** The pain severity correlates with psychological, social and professional dysfunctional behaviour through symptoms like insomnia, anorexia, irritability, depressed mood, loss of interest in many activities. Mechanism of action: Trazodone inhibits the serotonin reuptake and antagonizes 5HT<sub>2A</sub> and C receptors. Thus, it has no gastrointestinal side effects and it decreases the nociceptive transmission, inducing analgesia.

**Objective:** Antidepressants are indicated in the treatment of chronic pain because they act not only on the sleep disorders, anxiety and depressed mood but, also, on the pain itself.

**Method:** A study group consisted of 7 patients, females, age between 45 and 53, diagnosed with breast cancer in different stages (IIA- 2 patients, IIB- 3 patients, IIIA- 2 patients). They received this diagnosis in the last month and were referred to the psychiatrist for a depressive symptomatology. Initial evaluation included a Clinical Global Impression (CGI) and a HAMD score. After one month there was realised another evaluation considering the same items.

**Results:** Pain intensity diminished considerably in all the 8 cases as it was evaluated on CGI scale. From an initial severity score of 6 pain intensity diminished to a 2 points score in one month. Intensity of the pain had reduced proportionally with HAMD score (from 26 to 16).

**Conclusion:** Trazodone is a very effective treatment of neoplasm associated pain and thus determines an improvement in the quality of patients life.

**P124**

Countertransference in psychotherapy of psychosomatic patient

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The psychosomatic approach uses interventions of physical medicine as well as psychotherapeutic techniques in dealing with somatic illness. Being opened towards benefit for both of them, Knowledge of Da psychotherapy enables making deals with psychological components of somatic illnesses of using a plausible theoretical framework . It also makes it possible to recognize the role of transference and countertransference which are of importance in each therapist relations between doctors and their patients (some patients, for example, might wish to be healed to satisfy his doctor, others might to refuse the treatment to punish his therapist). Countertransference is particularly important in the treatment of the patient with psychosomatic. Its recognition makes it possible to select. It is necessary to recognize a right moment for intervention or for withdrawing from it an ion is better education in psychotherapy and experience is consequent in a matter of handling with psychosomatic pathology as well as successfully resolved. Personal traumatic experiences and professional experience will facilitate the treatment of psychosomatic problems, make it easier for the therapists to deal with his tasks and make people with psychosomatic problems deal better with problems that their illness brings them.

**P125**

Mental disturbances in the remote period of a light cerebral trauma

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For an estimation of outcome of traumatic illness after the transferred concussion of brain (COB), we have led catamnestic research for 31 patients by a method of correspondence questioning. It was tracked catamnesis from 2 to 5 years. From the received answers to inquiry it is known, that 30 persons work or continue study, in 29 cases work corresponds to their qualification before COB. In the first case the patient has been compelled to replace former work on less qualified because of the expressed cerebrasthenia. 9 sick (29%) do not show complaints, count themselves completely restored after a trauma. 22 (71%) patients had various complaints to health, connecting them with endured COB. Complaints to forgetfulness of the current events, mood swings, headache, irritability, difficulty of concentration of attention, fast fatigue, weakness formed symptom-complex. Irritability and excessive excitability mainly prevailed for 13 (41%) patients. Four (12%) patients had an insignificantly expressed fixed amnesia. Five (16%) had mood swings of depressive type. Two have committed suicide. In these cases it is impossible to exclude transformation of disturbing depression of acute period of COB in distimia which has formed base for suicide.

**Conclusion:** Existence for 71% of patients of mental disturbances of a neurotic level requires development of new criteria of the subsequent regular medical check-up after an extract of patients from hospital, despite of seeming lightness of COB.

**P126**

An experience of using psychotherapy in combination with triiodothyronine in treating depressive symptoms of breast cancer

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**Aim:** To discover the influence of combination rational psychotherapy with triiodothyronine on depressive symptoms in breast cancer (for people who take tamoxifen).

**Method:** Clinical-psychopathological, hormone research. The results: The connection between the function of thyroid gland and the character of depressive symptoms has been found for women who had been taken an anti-estrogen tamoxifen for a long time. First of all, I mean by depressive symptoms, a permanent tiredness. Women feel extremely bad in the morning. They impress the feeling of inner emptiness, the absence of plans. They often live among illusions and fears, especially in the darkness. We have noticed also the deep sensibility to such agents as light and sound. Several women confessed that they could see worse, that there were some difficulties with articulation and there was an awkward movement. The version of decreased thyroid hormones has been verified by several unspecific symptoms. It is important that the cancer was of the same size as laboratory results showed. By laboratory investigation we know that the level of thyroid hormones in blood has decreased until 0,79 nmol/l. For people cured with triiodothyronine these symptoms have been treated badly by psychotropic drugs. But the using of psychotherapy in combination with triiodothyronine has forced the symptoms to desperate gradually.

**Conclusion:** There is an effective method of treating depressive symptoms in breast cancer for people who takes anti-estrogen for a long time. It is the combination of rational therapy with triiodothyronine.

**P127**

Psychological distress in women at risk for hereditary breast, ovarian or colon cancer without demonstrated mutations

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**Purpose:** To examine psychological distress in women at risk for hereditary breast-ovarian cancer (HBOC) or hereditary non-polyposis colorectal cancer (HNPCC) with unknown mutation. Patients and methods: 253 HBOC women and 77 HNPCC women, all unaffected and with unknown mutation, who filled international criteria for HBOC or HNPCC, were included. They had all been offered genetic counselling and informed about their risk before the study. Comparison was made between these groups, norm data, and data for women who tested positively for BRCA1 mutation. Psychological distress was measured with four well-established questionnaires.

**Results:** No significant differences were observed between the HBOC and HNPCC women on any measures of psychological distress. Compared to the norm, the level of anxiety was significantly higher and the depression was significantly lower in the groups with unknown mutation. Compared to BRCA1 mutation carriers, the level of anxiety and depression was significantly higher in the HBOC group with unknown mutation.

**Conclusion:** Women without known mutation for HBOC or HNPCC have an increase risk for an anxiety disorder. The results substantiate that the genetic counsellor has to deal with anxiety in the affected kindred's seeking counselling.

**P128**

Pharmacoepidemiological monitoring-therapy of insomnia

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Frequency of protracted insomnia with noxious influence on mental and physical performance, general adaptive abilities and quality of life, made it a main objective in exploration and attempts for an adequate treatment. Monitoring was carried out in six psychiatric centers in Serbia during the period of 14 days. Eighty-three patients, 47 females and 36 males, aged 18 to 65 were involved. Target group consisted of patients with diagnosis of severe insomnia, 10% transitory, 31% short insomnia and 59% of patients with chronic insomnia, according to DSM IV-Icd 10 classification. The instruments used for evaluation were instruments for diagnosis of insomnia, Clinical Global Instruments and MOS sleep questionnaire. Therapeutic effect of zolpidem was noted after the first application and two weeks afterwards. Estimate of zolpidem on the second visit with CGI scale showed that 42% of patients had significant general improvement and only 1% of patients were with no effects. When compared before zolpidem use and after 14 days the state of patients showed significant statistical improvement of quality of sleep, awakening without fatigue, decrease of the problems of failing

asleep, reduction of the number of awakening during the night, satisfactory length of sleep and decline of problems to stay awake during the day. Only two cases showed adverse effects, one with headache, one showing lowering of blood pressure, which did not influence therapeutic efficiency. Zolpidem showed hypnotic efficacy with minimal adverse effects and improvement of patients daily functioning.

**P129**

Treatment of somatoform and psychosomatic disorders at an outpatient psychiatric clinic

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Somatoform disorder (SFD) refer to a subgroup of mental disorders where physical symptoms are not primarily due to physical structural defect (ICD 10 category F.45). Asthma, dermatitis, mucous colitis ...belong to a group of psychosomatic disorders (ICD 10 Category F.54). We studied cohort of 46 patients in whom symptoms were present for more than 2 years. Twenty one of them had patients diagnosis F.45 ( 14 /women and 7 men, average age 49y and 25 patients with the diagnosis of (F.54)(17 of them women and 8 men, with a total average 53y. Patients in both groups had also other co-morbid mental disorders. We examined the treatment that they received. In patients with somatoform disorders the most common treatment was combination of atypical antipsychotic medication (sulpiride) with an SSRI antidepressant and an anxiolytic agent. Psychosomatic disorders were mostly treated with an SSRI antidepressant and an anxiolytic agent or with combination of atypical neurolepticum (sulpirid)/with an SSRI antidepressant and anxiolytic agent.

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## Poster Session 2: Child and Adolescent Psychiatric Disorders

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**P130**

Ethnicity minority and pre-adolescent depression: Depressive symptoms in Hungarian Roma (Gypsy) children

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Authors collected 2 samples of children from the data pool of a large nationwide study to contrast two ethnical groups of children (Finno-Ugrian Hungarian children vs. Roma (Gypsy) peers) on the field of depressive symptoms, aggressivity and suicidal behaviour, if the between-group differences: a) are due to ethnical background or b) can be attributed to the distortion effect of the estimation.

**Method:** The brief version of Children's Depression Inventory (Kovacs 1985,1992) was used. Data of 3309 Finno-Ugrian Hungarian children (1647 males, 1662 females, mean age 13.0 SD 1.2) were compared with identical items of children who identified themselves as coming from Roma-Hungarian communities (n: 368,180 males, 188 females mean age 13.3 SD 1.3). Roma-

Hungarian children had significantly increased level in depressive items, irritability and suicidal behaviour in each age and sex sub-groups. In the parametric comparison, Roma pre-adolescent girls report significantly more depressive symptoms in the majority of items and have a greater risk of depression than Hungarian peers of the same age and gender control samples. Roma pre-adolescent boys have also increased test-depression compared to Hungarian boys but to a lesser extent. To uncover realistic differences, bias/distortion effect of each CDI item was investigated by means of Ramsay's Testgraf method.

### P131

Neuropsychiatric symptoms among African school children in Kinshasa

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**Background:** The overall prevalence of mental and behavioral disorders among children has been investigated in several studies in high-income countries and varies around 10%. In Africa, little is known about child neuropsychiatric disorders. Therefore, the present study was conducted to determine the prevalence of neuropsychiatric symptoms among school children and to assess the usefulness of the Strengths and Difficulties Questionnaire in an African urban setting.

**Methods:** An epidemiological survey was conducted from July to September 2002. A total of 1187 children aged 7 to 9 years recruited in 10 randomly selected primary schools were screened using the Strengths and Difficulties Questionnaire (SDQ). The SDQ is a behavioural screening questionnaire with 25 items administered to teachers of 4-16 years old children. The questionnaire generates scores in five areas (hyperactivity, conduct, emotional, peer relations and prosocial) and a total difficulties score. Abnormal scores were defined according to British criteria given by Goodman.

**Results:** The overall prevalence of neuropsychiatric symptoms among school children was 22% and boys were more affected than girls according to the teachers' report. The prevalence of different problems were hyperactivity (15%), conduct (19%), emotional (11%), peer relationship (15%), and prosocial (21%). Of the five scores, gender differences were seen only among children with conduct problem.

**Conclusion:** Neuropsychiatric symptoms are common among Congolese school children. This study needs to be followed by an in-depth study to verify if the ratings found in this study correspond to true neuropsychiatric disorders. Key words: Neuropsychiatric symptoms, school children, SDQ, Kinshasa.

### P132

The structure of mental frustrations in the group of neglected minors

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The analysis of the external and internal conditions forming the neglect of children and promoting their deviant behavior, the psychiatric aspect of the minors' neglect problem are not investigated enough. The medical-rehabilitation chambers for rendering the complex medical, psychotherapeutic, psychological and social help for the minors were organized in the Saratov regional psychiatry

hospital. During 2002 74 children aged 11-18 were taken from the boarding schools, shelters, social-rehabilitation centers and families with the socially dangerous statement. The purpose of this research is studying of the structure of mental frustrations in the given group of teenagers and finding the ways of their correction. The clinico-epidemiological, clinico-psychological, pathopsychological methods of research were applied for studying the minors' groups and their family surrounding. Breaches of inclinations like impulsiveness, aggression, waking up of sexual and food inclination were marked in 16 (22%) examined patients. 52 (20,2%) teenagers showed personal deviations. They represented pathocharacteristical personality formation on the basis of excitable, hysterical and emotionally unstable type. The delinquent behavior took place practically with all the teenagers and was presented by propensity to theft, extortion and aggressive-violent behavior. The duly diagnostics and correction of the deviant forms of behavior that neglected minors have, will allow to improve their social functioning. The model of rendering the specialized psychiatric help to this category of children with the participation of the psychiatrist, psychologist, psychotherapist and social worker gives us the possibility not only to give a full treatment but to improve the future school and social adaptation.

### P133

The categories of pervasive developmental disorders

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Autism, the central syndrome among the pervasive developmental disorders is often difficult to diagnose, be marked off out of the beginning. First manifestations in children are similar to the initial prominent difficulties in language expression, attention deficit disorders, mental retardation with psychosis, deafness with behavioral problems and other mental disorders in childhood. Early diagnosis established by child psychiatrist is often no more than working but can be considered as a wrong diagnosis wrong by laymen or even some experts. We analyze evolution of psychopathological manifestations in children diagnosed within a range of pervasive developmental disorders, as well as the timely evolution of established diagnosis (over the decade).

### P134

Anxiety and depression problems in children with learning disabilities

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Previous studies at Penteli Children's Hospital (based on Achenbach Children Questionnaire, completed by parents) indicated that children with learning disabilities present secondary psychological problems (e.g. depression). At the present study we aim to extend and systematize the typology of psychological problems on a large clinical population of dyslectic children, aged from 7 to 14. The sample was consisted of 100 children. As part of the clinical assessment, apart from Achenbach Questionnaire for parents, we provided children with the Beck Personality Questionnaire. We found that parents generally underestimate those affective problems and focus on the treatment of the learning disabilities. However, the Beck Personality Questionnaire indicated that 26% of children have low self-concept, 31% anxiety and 19% depressive feelings.

**P135**

Deprivation reactions in children at destructed families

G.G. Butorin\*. *State University, Chelyabinsk, Russia*

**Objective:** The aim of undertook study was to evaluate the association between impaired family's structure and behavioral disorders in children.

**Methods:** We selected 212 children with 'school maladaptation syndrome' which parents came to Russia from Republics of Former USSR. Outcomes of multidisciplinary investigation that was produced by means of clinical, psychological and psychopathological methods with psychometric and projective tests revealed the significant negative changes of family structure such as a decreasing of divorces, conflicts, inverting of upbringing styles etc. that disturbed 'psychological health of families.

**Results:** The disordered behavior of children within above condition was defined as deprivation reactions that nevertheless have not reach a psychotic degree and were limited by sub-pathological characteristics. A complex of psychological and psychotherapeutic family care in 67% of cases compensated the revealed impairments and reaction's dynamic was defined as a reparative one. When the remediation did not give a sufficient effect (33%) the dynamic was registered as a prolonged one.

**Conclusions:** Therefore, the study findings suggest that behavioral problems in children were occurred by destruction of family harmony and could be presented as reaction of psychological defense with the intense to reconstruct the previous (former) family psychological atmosphere.

**P136**

Children of divorce: The hidden father or how to dodge the question

G. Cohen-Adad\*. *The Jerusalem Medical Center, Jerusalem, Israel*

In scientific literature father-child interactions are largely under-represented (5%) versus mother-child interactions, not reflecting the daily realities of 'share' care of the children, in many families. And eventually if the mother is ill functionally (which is not infrequent) most of the childcare may be transferred to the functioning parent, in this case the father. And, as a result, the children may simply get more attached to their father than to their mother, asking for their father, when reassurance is needed. When shared or alternate custody of the children is not the rule or even rare, like in Israel, painful and distressful separation is enforced between the psychologically immature children and their father. The effects of early separation on the children are well known with lower school achievement, behaviour problems and depression. Substance abuse and suicide in the youth, observed in the 3 last decades, may be the result of a feeling of abandonment when both of the parents are busy with themselves and trying to build a new family. Child abuse may be related to the psychopathology of the parent custody or of step-father in step-families. The father, especially when discouraged to visit his children, may be subject to (stress-related) chronic fatigue syndrome, PTSD-like symptoms (when battered, which is less infrequent than previously thought), depression with severe suicide attempts or even suicide. Cases vignettes will be presented.

**P137**

Affective disorders of epilepsy in childhood

E. Malinina\*. *Ural State Medical Academy, Chelyabinsk, Russia*

**Actuality:** The purpose of the work was a clinical-psychopathological study of the qualitative contents of affective pathology in children suffering from epilepsy.

**Methods:** We investigated 24 children, aged 5-12 years, with various forms of epilepsy and affective symptoms of interconvulsive periods in clinical picture. The diagnosis of epilepsy and its various forms were established according to the International Classification of Epilepsy (1989). The first group revealed 9 idiopathic forms, and the second group, 15 symptomatic forms.

**Results:** Analysis of the data obtained revealed the prevalence of emotional liability, instability, alarm, and fears of a neurotic character and caused by psychogenic situations among the patients of the first group. The second group of children more often had a combination of two or more affective symptoms: emotional liability, episodes of dysphoric condition with irritability, reactions of protest, effect of rage and aggression. Dysphoric conditions were combined with viscosity of emotions, prevalence of gloomy mood. Intensity and duration of disorders depended on age of the patient and duration of disease.

**Conclusion:** The character of affective disorders of epilepsy in childhood is sufficiently non-uniform, multifactor in nature, and the features of affective symptoms can be related to age, form of disease and localization of the epileptic center.

**P138**

Clinical and neuropsychological features of depressive behavioural disorders in childhood

N.B. Khotyanovskaya\*, L.A. Benko. *Ural State Medical Academy for Advanced Education, Chelyabinsk, Russia*

**Actuality:** The purpose of this study was to investigate clinical features of depression combined with various types of deviant behaviour in teenagers with non-psychotic forms of residual-organic psychosyndrome (ROPS).

**Methods:** In the child psychiatric ward we surveyed 46 teenagers, aged 12-15 years (32 boys and 14 girls) with behavioural disorders (F 92.0) by way of clinical-anamnestic, clinical-psychopathological, neuropsychological and neurophysiologic methods. The presence of ROPS was confirmed by data of clinical and paraclinical examination.

**Results:** The various types of deviant behaviour, both verbal and nonverbal in character, were imposed on long-term 'neurotic' depression (F 34.8). The study of affective disorder syndromes with prevailing variants of depressions appeared as disturbing (49%), dysphoric (26%), apathetic (17%), and anaesthetic (8%). Analysis of neuropsychological diagnostic characteristics of the revealed variants showed that apathy and dysphoric variants, prevailed in the impairments of programming and control of mental activity. Most cases of dysphoric and anaesthetic variants (63% and 59%, respectively) revealed impairment of subcortical functions. Each neuropsychological syndrome was accompanied by markers of a functional inconsistency of a zone, expressed as insufficiency in spatial analysis and synthesis.

**Conclusion:** The various types of depressive disorders, imposed on an organic background, have prevailing cerebral localization and require further research for the purposes of adequate therapy and correction within the frame of multidisciplinary care.

**P139**

Risk factors of depressive behaviour disorder of primary pupils with school skills impairments

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**Actuality:** Specific school skill development disorders, when chronic poor training requires a versatile estimation, seem to be the most significant reasons for school maladjustment.

**Methods:** A study conducted by a multidisciplinary team of experts on poor-achiever, primary class pupils (aged 6-8 years) revealed school skill disorders in 56 (13.6%) cases. For this intensive study, we used the following set of methods: clinical-psychopathological, neuropsychological according to the Luria scheme, and psychologo-pedagogical methods aimed at revealing the intellectual and mental peculiarities of the children.

**Results:** It was established that a basis of school maladjustment laid both specific school skill disorders and emotional-behavioral impairments that met the concept of depressive behavioural disorder (F 92.0). The results of the clinical-psychopathological and psychological examinations of the investigated group of children showed that conducting disorders included weakness of concentration of/or attention, difficulty at storing/in memory ability, rapid onset of fatigue, inertia of intellectual processes, and affective infringements. The specific impairments of school skills combined with changes in speech and motor functions were reflected in hyperactivity syndrome, fears, system neurosis and vegetative infringements. The behavioural disorders bore a more socialized form with either reject or aggressive tendencies. The risk factors of depressive disorder were referred: educational level of the parents, early organic pathology, existence of neurological marks, male, level of intellectual development, feature of the person, motivation of the doctrine, incompetence of the teacher.

**Conclusion:** The basic principle of care and correctional work should be a complex method with participation of the multidisciplinary experts prior to the beginning of school training.

**P140**

Gender differences among depressed suicidal children

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**Objective:** To examine the clinical symptoms and comorbid disorders of depressed children with and without clinically significant suicidal ideation stratified by gender.

**Methods:** Children aged 7 to 17 years with a current DSM-III-R major depressive disorder (MDD) were recruited from inpatient/outpatient clinics (n=135). Current MDD symptoms and lifetime comorbid psychiatric disorders were assessed using the Schedule for Affective Disorders and Schizophrenia for School-aged Children (K-SADS). Thirty-two percent of the depressed subjects were classified as suicidal (lifetime or current) on the basis of having at least suicidal ideation with a plan (n=43).

**Results:** Suicidal depressed children were significantly older than the non-suicidal depressed children (P<.02). Controlling for age, there were significant interactions between suicidality and gender for hopelessness (P<.03), duration of MDD (P<.03), and

comorbid oppositional disorder (P<.005). Within females, suicidal depressed girls were significantly more hopeless (P<.003), had a longer duration (P<.04), and were more likely to have comorbid oppositional disorder (P<.02) compared to non-suicidal depressed females (P<.05). Among suicidal children, suicidal depressed girls were significantly more hopeless (P<.03) compared to Suicidal depressed boys.

**Conclusion:** There appears to be a gender difference for some clinical features, particularly hopelessness, among suicidal depressed children. Whether hopelessness is a gender specific characteristic of suicidal depressed children requires further study.

**P141**

Long-term family violence can be a cause of suicide attempt in adolescents

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Family is a source of many expectations, especially the emotional one. Growing in a family burdened with poverty, alcoholism and violence can be fundamental for development of different psychosocial disorders manifested instantly or later in life. The results of this work are based on detected cases and brought criminal charges for child and adolescent neglect and abuse, from 1979 till 1999, in one of the Croatian County Region. Total of 54% of all analysed victims were exposed to the family violence for their entire life. But they were also neglected, physically, emotionally and sexually abused. Almost all analysed victims who were exposed to long-term family violence has developed one or more psychosomatic diseases, had some behavioural disorders (affective of risk-taking disorders), or had have different physical disorders. One case of adolescent attempt suicide was noted. It was a boy who was neglected, physically and emotionally abused by his father for most of his life. At the age of 14, he became delinquent and placed in the facility for the risk-behaviour children. He was diagnosed with emotional instability, anxiety and burdening of family unsteadiness. In this state of mind, he felt isolated from his family and tried to commit suicide using pills and alcohol. It is necessary to recognise and adequately punish the family abuser as soon as possible so that the children can have a childhood without any unnecessary burden.

**P142**

Structure of psycho-vegetative syndrome within non-psychotic forms of residual-organic cerebral symptoms in children

L.A. Benko\*. *Ural Medical Academy for Advanced Education, Chelyabinsk, Russia*

**Objectives:** Psycho-vegetative syndrome being the key characteristic of residual-organic symptomatology is one of the most urgent fields in modern psychiatry.

**Methods:** At the resent research, we attempted to study the structure of vegetative disorder within non-psychotic forms of residual-organic mental syndrome. To achieve these goals 80 children in the age of 6-12 years (57 male and 23 female) were surveyed. The set of scientific instruments included clinical-anamnesis and clinical-psychopathological methods, neurological and neuropsychological assessment. Besides, the parameters of vegetative tonus and vegetative reactivity were estimated.

**Results:** The outcomes evidenced, that in 87% of cases prevailed sympathetical tonus, and thus in 78% vegetative reactivity was

reduced, in 12% - perverted. The development of vegetative dysfunction carried mainly a permanent character.

**Conclusion:** Thus, the results of research have shown the expressed dependence of somatized diseases etiology from residual cerebral pathology in children.

### P143

#### Immigration and mental infantile health

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The phenomenon of the immigration is growing progressively especially in Europa Occidental's countries. One of the consequences, inside the psychiatric field is the appearance of a new population. It is the increase in the number of specializing consultations, both of adults and of children. In the study, we tried to analyze the motives of consultation of the immigrant children to the centers of mental infantile health and we will try to determine if they are the same of those of infantile native population or if on the contrary the motives of consultation are different, being able turn implied multiple factors, between them the own fact of the immigration. We realize a comparative study between all the immigrant children, 16-year-old minors, who came to a center of mental infantile health between 1999 and 2002, and all the native children, also 16-year-old minors, who came to the same center of mental health in a period of 6 months. They were born in mind the age, sex, country of birth, country of origin of the parents, diagnosis CIE-10, and treatment. Between other conclusions, we observe that the number of immigrant children who come to the specializing consultations of mental health is growing progressively and also we observe that the most frequent disorders that appear in these children are in the habit of being related to adaptative disorders (F 43) and with behavior disorders (F 90-98).

### P144

#### Heterogeneity in conduct disorder

P.J. Rogue<sup>1,2,\*</sup>. <sup>1</sup>Université Louis Pasteur - Médecine, Strasbourg. <sup>2</sup>Institution Mertian, Andlau, France

**Background:** Disruptive behavior disorders (DBD) are some of the most prevalent and impairing problems of adolescence. DBD includes conduct disorder (CD), a severe form behavioral disinhibition syndrome. CD itself is heterogeneous, though there is little consensus concerning subtyping.

**Objective:** Explore the relation between emotional responses and conduct problems in adolescent males.

**Method:** 82 youths (15.7 +/- 2.1 years), referred to an employment training program (Institution Mertian) following behavior problems, were screened using scales including the Psychopathy Screening Device, to evaluate callous-unemotional (CU) traits. Psychiatric status was assessed using DSM-IV criteria.

**Results:** The most prevalent diagnoses amongst these was CD (47.7%), with significant comorbidity. Differences between adolescents with and without CU traits are observed, irrespective of the presence of conduct problems: youths high on these traits showed features typically associated with psychopathy (lack of behavioral inhibition,...) and seemed less distressed by their behavior prob-

lems. When the CD group is compared to the non-CD group, lower levels of empathy and higher levels of excitement following described transgressions are observed. Furthermore conduct problems in the context of CU traits tended to be more severe. CU traits also show predictive value. These outcomes could not be solely explained by initial severity of conduct problem.

**Conclusion:** These initial results support the past findings showing that in adolescent males, CU traits are associated with lower emotional distress traits and more severe conduct problems. This study also supports the use of a callous-unemotional trait in subtyping CD.

### P145

#### The prevalence of ADHD in urban population of 8 y o. pupils in Poland

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**Objective:** The lack of reliable data on the prevalence of ADHD in non-western European countries imply the necessity to assess the prevalence rate of this behavioral disorder in Poland. Method and procedure: 10 primary schools from a Polish town of approx. 400,000 inhabitants (Bydgoszcz) were chosen from random districts (according to two independent criteria: socioeconomic and populational). Two classes from the second form (8 y. o. children) were chosen at random from each school to study. Well trained in recognition and identification of ADHD symptoms (according to DSM-IV-TR) estimators had been observing study groups during the lessons as well as in breaks settings (during the playtime). The observations had lasted for at least 4 hours. Then, the remarks from direct observation were compared with parents' data from school documentation.

**Conclusions:** 445 children (226 boys and 219 girls) were directly observed. We found 29 children (21 boys and 8 girls) who fulfilled all five groups of ADHD criteria (according to DSM-IV-TR). It makes 6,52% rate of prevalence of ADHD among the population of children at the age of 8 (assessed in school sample). The percentage of ADHD prevalence among boys is much higher than among girls (9,29% vs 3,65%). In all identified ADHD cases we find: approx. 60% Combined Type (girls to boys ratio 1:2,5); approx. 30% Predominantly Inattentive Type (girls to boys ratio 1:2); and approx. 10% Predominantly Hyperactive-Impulsive Type (only boys).

### P146

#### The Zurich-Study: ADHD-scale and psychiatric disorders?

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**Background:** The Zurich Study is a long term epidemiological study with 591 participants that provides representative data on the longitudinal outcome of traditional psychiatric syndromes. Since 1979, six waves of interviews were conducted that comprised the administration of a multitude of instruments, including the Symptom Checklist-90-revised (SCL-90-R, Derogatis 1977). Although the Zurich Study assessed all common psychiatric syndromes, no information regarding the diagnosis of Attention-Deficit Hyperac-



tivity Disorder (ADHD) is available. We intended to identify participants with possible ADHD by applying a psychometric scale with characteristics of ADHD.

**Methods:** Based on the SCL-90-R, a scale for the assessment of ADHD was built using 8 items of the SCL-90-R best reflecting specific symptoms of ADHD. Methods included were cluster analysis and discriminant analysis. According to this scale, a group of individuals with possible ADHD was identified.

**Results:** First results show the existence of a distinct and time-stable group of 66 individuals affected by a high degree of specific symptoms of ADHD. High association with anxiety disorders (63% in men, 75% in women) and major depression (37% in men, 56% in women) was observed.

**Discussion:** The 'ADHD-Scale' shows stability over 20 years in the affected participants. Furthermore, this scale is highly correlated with anxiety disorders and major depression, which is in accordance with the literature. Prospective investigation of the validity of the proposed scale is needed.

### P147

A laboratory classroom comparison of concerta and equasym XL in school-age children with ADHD: The COMACS Study

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**Objective:** The COMACS study compared the effect for two, once-daily extended-release formulations of methylphenidate-Metadate®CD (expected to be marketed as Equasym XL in Europe, MCD) and Concerta® (CON) - in children aged 6-12 years with ADHD across the day in the analog classroom setting.

**Methods:** This was a multi-center, double-blind, placebo controlled crossover study. A total of 184 children were stratified based on their pre-study treatment with methylphenidate to receive AUC-equivalent daily doses of the active treatments and PLA (placebo) for 7 days, with surrogate measures of efficacy obtained during 7 classroom sessions spread across the last day of each treatment. The primary outcome measure was the SKAMP Department scores averaged over the first five classroom sessions (1.5 to 7.5 hours post-dose). Data were analyzed using an ANOVA, and treatments were compared using paired-sample t-tests.

**Results:** The ANOVA revealed a main effect of Treatment which was significant ( $p < .0001$ ). Treatment with MCD resulted in statistically significantly lower (better) average SKAMP Department ratings than treatment with CON or with PLA ( $p < .0001$ , all doses and periods combined). Further post hoc analysis indicated that treatment with MCD resulted in statistically significantly lower average ratings than treatment with CON or with PLA at each dose level ( $p < .05$  for all). Adverse events were consistent with those previously reported for methylphenidate and did not differ between active treatments.

**Conclusion:** AUC-equivalent doses of MCD and CON lead to different ratings of department during the period that corresponds to the school day (1.5 though 7.5 hours post-dose) regardless of dose level.

### P148

Use of risperidone in conduct disorder

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Several researches point out that risperidone reduces aggression in children with conduct disorder. It is indicated as 1st line medication in severe aggression. On the other hand there are some considerations and side effects that should be considered such as weight gain with striae which may be worse in adolescents as well as insomnia and rarely reported enuresis. The six-week open-label trial was conducted with 15 children and adolescent (aged 12-18) diagnosed with ICD10 criteria and with score of 24 or greater on the Conduct Problem subscale of the Nisonger Conduct Behavior rating Form (NCBRF). Mean baseline score was 9.8. The average dose of Risperidone was 3.5 mg per day. After six weeks mean decrease in aggression score was 6.1 in sample group. Risperidone has been shown to be very effecting in reducing aggressive symptoms in conduct disorder group. There were no side effects reports.

### P149

Tourette spectrum disorders among adolescents and efficiency of combo therapy with risperidone and fluvoxamine

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**Objective:** This presentation is reporting the analysis of treatment of 12 adolescents with Tourette Syndrome (TS) by using atypical and SSRI's combos. It is well known that in most of the cases individuals with TS gradually develop a combination of different motor and vocal tics. Adolescents with TS also develop associated behavioral problems, particularly obsessive-compulsive behavior, lack of concentration, hyperactivity and impulsivity.

**Method:** 12 adolescents (from 13 to 18 years old) with TS were included in this study. In addition to tics, behavioral difficulties and OCD components were observed in all patients. They received a combination of Fluvoxamine (50-150 mg PD) and Risperidone (0.5-2 mg PD). Evaluation was made during 12-18 weeks according to Children's Yale-Brown Obsessive Compulsive Scale (CYBOCS) and CBCL. The diagnosis of TS is based upon a thorough clinical evaluation, observation and assessment of characteristic symptoms and a careful patient and family history (with consideration of ICD-10).

**Results:** After 3-4 weeks of therapy, we observed reduced motor and vocal tics and alleviated associated behavioral problems, such as obsessive behaviors and impulsivity.

**Conclusion:** The combination of dopamine-blocking agents and Serotonin agonist renders significant effectiveness. This is supported by the observation that dopamine-blocking agents (dopamine receptor antagonist) suppress tics. In addition, abnormalities in Serotonin activity are thought to play some role in causing symptoms associated with TS.

### P150

Long-term effects of Atomoxetine on growth in children and adolescents with ADHD

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Treatment for attention-deficit/hyperactivity disorder (ADHD) is typically maintained over periods of months or years and, as a result, the potential effects of pharmacotherapy for this disorder on

growth have been an area of concern. This meta-analysis examines the effect on growth of atomoxetine, recently approved in the U.S. for the treatment of ADHD. Patients (N=412) were 6 to 16 years of age at the start of the treatment period and had received atomoxetine treatment (maximum dose: 1.8 mg/kg/day) for at least 2 years. Weight and height measurements were analyzed both as actual values and after conversion to percentiles and z-scores based on growth charts from the Centers for Disease Control and Prevention (December 4, 2000). Expected weight and height at endpoint were calculated by extrapolating from patient's baseline percentiles using the growth charts. Results indicate that, after 2 years, observed height and weight were close to those predicted by patients' baseline height and weight. Height increased an average of 13.3 cm, a decrease relative to baseline normative heights of -2.2 percentiles and corresponding to 0.4 cm ( $p=.02$ ). Weight increased an average of 10.8 kg, a decrease relative to baseline normative weight of -2.7 percentiles and corresponding to 0.9 kg ( $p=.002$ ). For both height and weight, patients who were smallest at baseline had an increase in endpoint percentile, while patients in the highest quartile had a decrease. These findings suggest that, for most pediatric patients with ADHD, long-term atomoxetine treatment is unlikely to have marked effects on growth and final stature.

### P151

Atomoxetine in the long-term prevention of relapse in ADHD

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**Objective:** Atomoxetine is a selective norepinephrine reuptake inhibitor effective for the treatment of ADHD acutely, but no long-term, placebo-controlled results have been reported to date. We conducted a 9-month relapse prevention study to assess the efficacy of atomoxetine during chronic treatment.

**Method:** Patients aged 6-15 who met DSM-IV criteria for ADHD were treated for approximately 12 weeks with atomoxetine to an initial target dose of 1.2 mg/kg/day and a maximum dose of 1.8 mg/kg/day. Patients whose symptoms remitted were randomized to 9 months of continuation therapy with atomoxetine or to placebo under double-blind conditions.

**Results:** 604 patients entered the study and received atomoxetine. Of these, 416 met response criteria and were randomized to continued atomoxetine or placebo. After 9 months, 52.6% of patients assigned to placebo compared with 29.7% of patients assigned to atomoxetine had a worsening  $\geq 50\%$  in symptom severity as measured by the ADHD Rating Scale-IV and an increase in CGI-Severity of at least 2 points post-randomization ( $p<0.001$ ). Psychosocial functioning was also superior in the atomoxetine group as assessed by the Child Health Questionnaire (CHQ). Safety and tolerability were similar to those observed in acute treatment trials.

**Conclusion:** During 9 months of continuation therapy, atomoxetine was superior to placebo in maintaining symptom improvements and psychosocial functioning.

### P152

Efficacy of atomoxetine in placebo-controlled studies in children, adolescents, and adults with attention-deficit/hyperactivity disorder

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**Introduction:** Atomoxetine is a highly specific inhibitor of the norepinephrine transporter that has been developed as a nonstimulant treatment of attention-deficit/hyperactivity disorder (ADHD).

**Methods:** Eight large, acute, randomized, double-blind, placebo-controlled studies (4 in children, 2 in children and adolescents, and 2 in adults) have been conducted involving atomoxetine in the treatment of ADHD. Three trials in children were conducted with once-daily dosing (6-8 weeks), whilst the other 5 studies employed twice-daily dosing, all on a weight-adjusted basis (8-9 weeks). Adults were dosed twice daily over 10 weeks with dose escalation within a fixed range. Protocol-specified primary outcome measures in 5 of the pediatric studies were parent-reported assessments corresponding to DSM-IV symptom criteria, and 1 involved teacher-reported assessments. Adult studies were self-reported.

**Results:** In all studies, atomoxetine was superior to placebo in reduction of mean symptom ratings for the primary outcome measure. The effect size for once-daily treatment was similar to that of twice-daily treatment. No serious safety concerns were observed and tolerability was good, as evidenced by discontinuation rates of less than 5% for adverse events in the pediatric studies.

**Conclusion:** Atomoxetine appears to be safe and efficacious for the treatment of ADHD in children, adolescents, and adults.

### P153

Atomoxetine treatment in children with attention-deficit/hyperactivity disorder and comorbid tic disorders

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**Introduction:** This study was designed to test the hypothesis that atomoxetine does not worsen tic severity relative to placebo in children with Attention-Deficit/Hyperactivity Disorder (ADHD) and comorbid tic disorders.

**Methods:** Study subjects were between 7 and 17 years old, met DSM-IV criteria for ADHD, and had concurrent Tourette Syndrome and/or chronic motor tic disorder. Patients were randomly assigned to double-blind treatment with placebo (n=72) or atomoxetine (0.5-1.5 mg/kg/day, n=76) for up to 18 weeks.

**Results:** Atomoxetine treatment was associated with greater reduction of tic severity relative to placebo that approached significance on the Yale Global Tic Severity Scale ( $-5.5 \pm 6.9$  versus  $-3.0 \pm 8.7$ ,  $p=.063$ ), and Tic Severity Self-Report ( $-4.7 \pm 6.5$  versus  $-2.9 \pm 5.2$ ,  $p=.095$ ) total scores and achieved significance on the Clinical Global Impressions (CGI) tic/neurological severity scale ( $-0.7 \pm 1.2$  versus  $-0.1 \pm 1.0$ ,  $p=.002$ ). Atomoxetine patients also showed significantly greater improvement on the Attention-Deficit/Hyperactivity Disorder Rating Scale total score ( $-10.9 \pm 10.9$  versus  $-4.9 \pm 10.3$ ,  $p=.002$ ) and CGI severity of ADHD/psychiatric symptoms scale ( $-0.8 \pm 1.1$  versus  $-0.3 \pm 1.0$ ,  $p=.015$ ). Atomoxetine patients had greater increases in heart rate ( $+8.3 \pm 12.0$  versus  $-1.2 \pm 12.7$  bpm,  $p<.001$ ) and decreases of body weight ( $-0.9 \pm 1.9$  versus  $+1.6 \pm 2.3$  kg,  $p<.001$ ), and rates of treatment-emergent decreased appetite and nausea were significantly higher. No other clinically relevant treatment differences were seen in any other vital sign or adverse event or electrocardiographic or laboratory parameters.

**Conclusion:** Atomoxetine did not exacerbate tic symptoms. Rather, it appeared to decrease the severity of reported tics while reducing symptoms of ADHD. Treatment appeared to be safe and well tolerated.

## P154

Dose proportional pharmacokinetics of a methylphenidate extended-release capsule

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**Objective:** To assess the dose proportionality of the 10 mg, 20 mg and 30 mg methylphenidate extended release (MPH ER) capsule formulations in healthy adults. Materials: Metadate® CD (methylphenidate HCl, USP) Extended-Release Capsules (10, 20 and 30 mg), expected to be marketed as Equasym XL in Europe, were obtained from Celltech Manufacturing, Inc. (Rochester, NY).

**Methods:** This was a single dose, fasted, randomized, open-label, three-way crossover study in 24 healthy male and female subjects, aged 21–40 years. MPH plasma concentration-time data were used to calculate the pharmacokinetic parameters for each treatment. The 20 mg capsule, the first FDA approved dosage strength, was used as the reference treatment.

**Results:** 23 subjects completed all three study periods. Regardless of the dose, MPH ER capsules exhibited similar biphasic PK profiles, consisting of a sharp initial increase followed by a second increase in MPH plasma levels, all occurring at the same times. All 90% confidence intervals for the 10:20 mg and 30:20 mg dose-normalized geometric mean ratios for C<sub>max</sub> and AUC were within the 80% to 125% FDA limits for bioequivalence. Adverse events were mild and the number and types of adverse events experienced by subjects did not differ among the three dosages.

**Conclusion:** Data collected from this study demonstrate the dose proportionality of the new 10 mg and 30 mg dosage strengths of MPH ER capsules with the 20 mg capsule. The availability and predictability of these dosage strengths should facilitate dose titration of ADHD patients.

## Poster Session 2: Suicidal Ideation, Suicidal Attempts and Suicide

### P155

The comparative study of suicide ideation between psychiatric outpatients' and non-psychiatric outpatients'

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Suicidal phenomena's represent continuum from suicidal ideation through suicidal attempts up committed to suicide (Paykel, 1992). There are various reasons for suicidal ideation and suicidal actions. Neuropsychological deficit in the context of the psychiatric disorders can be associated with the risk of suicide. Into our evaluation we have included 40 randomly selected psychiatric patients treated at two psychiatrists' outpatients' clinic (group A) and 20 randomly selected patients from G.P. who had no prior psychiatric medical history (group B). During the actual exam, in group A, there was significantly higher occurrence of suicidal ideation (15 from 40 patients) in comparison to group B (1 from 20). The occurrence of the suicidal ideation, in the past was higher in group B (10 from 20 patient) in the comparison to group A (15 from 40 patients). 6 out of 40 patients in group A and 1 of 20 patients in group B admitted to have a suicidal tendencies in the past. We also look for HDRS, HARS and Beck's evaluation scale for anxiety in both groups. Suicidal ideation, suicidal attempts and committed suicide represent an important chapter in psychiatry and psychiatrists should not be afraid to ask about suicidal thoughts.

### P156

Psychoactive substances and suicidal thoughts of adolescents

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In this study is represented relation between suicidal thoughts and psychoactive substances abuse. In study were involved 202 adolescents, students of Banjaluka's secondary schools. By questioner for risky behaviors of adolescents (KB Kelly) was found that 28% of them have suicidal ideas. From those students, 11,8% used cannabis, and 2,0% other drugs. This represents 13,8% of total number of students with suicidal thoughts. It is possible to conclude that psychoactive substances abuse presents one of important risky factors in origin of suicidal thoughts as first step toward suicide. Key words: suicidal thoughts, adolescents, psychoactive substances

### P157

Suicidal behavior among adolescents in the Republic of Belarus

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At present the Republic of Belarus takes the 5th place in the level of suicides among the former states of the USSR after Latvia, Lithuania, Estonia and the Russian Federation. Suicide as a reason of death occupied the fourth place in the 1990-s after cardio-vascular diseases, new growth (neoplasm) and respiration diseases (Lasy, E.,

1999). Indices showing suicidal activity of adolescents in the Republic of Belarus (age group 15-19) are given in this article. According to the world standards during the period of 1997 - 2001 the Republic of Belarus kept rather a high level of suicide activity of adolescents: the average suicidal rate for 5 years was 15.3 per 100,000 persons of the population within the age group from 15 to 19. A characteristic feature of suicidal behavior of teens is a quantitative supremacy (8 -10 times) of suicidal attempts over committed suicides. The average number of suicidal attempts for 5 years (1997-2001) was 112.6 per 100,000 persons of the population (age group 15-19). Statistical data for 1999 show the leading position of Russia, Kazakhstan and Belarus among the CIS countries in the level of committed suicides among adolescents (the number of suicides in these countries is 22, 21 and 17.5 per 100 000 persons among the adolescents within the age group from 15 to 19 years old consequently).

Conclusions. According to the world standards range suicidal situation in the Republic of Belarus is regarded as unfavorable.

### P158

Association study of the serotonin 2A and 1B receptor genes with suicidal behaviour in two different populations from Russia

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Problem of suicide, both complete suicide and suicide attempts, is a very actual in a lot of countries. In Russia prevalence of suicide is 39.7 per 100 000 inhabitants per year (World Health Organization, 2001). Risk factors for suicide are composed of genetic and environmental influences. Several lines of evidence suggest that a serotonergic dysfunction is involved in the biological susceptibility to suicide. This study examined association of the HTR2A gene A1438G and the HTR1B gene G861C polymorphisms with suicide attempts in Russian and Tatar patients. 188 suicide attempters and 272 healthy volunteers were investigated. Both polymorphisms were genotyped using PCR method and subsequent enzyme digestion. This study suggests that both the HTR2A and HTR1B genes are likely to be involved in the biological susceptibility to suicide. Population differences between Russian and Tatar subjects in the allele and genotype frequency distribution of both polymorphisms were shown. In Tatar patients the allele A of the A1438G polymorphism of the HTR2A gene ( $\chi^2 = 4.65$ ,  $df = 1$ ,  $P = 0.025$ ,  $OR = 1.54$ ,  $95\% CI = 1.03 - 2.31$ ), in Russian patients the G/G genotype ( $\chi^2 = 14.76$ ,  $df = 1$ ,  $P = 0.0007$ ,  $OR = 2.83$ ,  $95\% CI = 1.63 - 4.91$ ) and the allele G ( $\chi^2 = 9.81$ ,  $df = 1$ ,  $P = 0.002$ ,  $OR = 1.88$ ,  $95\% CI = 1.24 - 2.84$ ) were associated with suicidal behavior.

### P159

Lipids serum level in MDD patients hospitalised due to suicidal attempts

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**Introduction:** Suicide is considered as a massive progressive health problem among the teenagers. This is one of the ten mortality causes in various countries in the world. This study has tried to investigate the relation of lipids serum level (as a predisposing factor) with suicide in Iran.

**Methods:** This is a descriptive analytic research on 100 MDD patients hospitalized in toxicology unit of Khorshid Hospital in Isfahan after committing suicide. The control group was selected from patients volunteers with no history of hyperlipidemia, cardiovascular diseases or depression.

**Results:** The findings reported total serum cholesterol of the study group (126.58 mg/dl, TG=69.88mg/dl, HDL=35.9mg/dl) lower than the controls (190.87 mg/dl, TG=153.56mg/dl, HDL=41.39 mg/dl). The findings also showed suicidal attempts among women and men as 69% and 39% respectively.

**Discussion:** This study has tried to define the serum lipids levels (total cholesterol, HDL, TG) in the patients with suicidal trials in comparison with controls. One of the parameters, already discussed to be associated with suicidal trials, is a serum lipid. Some of these researches report low serum lipids as a risk factor for suicide while some others suggest higher serum lipids level as a risk factor. In fact, this is yet an unknown mechanism how lower or higher serum lipid levels can affect on suicidal trials. Only further biochemical and cellular long-term studies may find an answer to this question.

### P160

Impulsivity, depression and plasma lipids in suicide attempters

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**Introduction:** There is evidence of a relationship between cholesterol and mood disorders, impulsive, violent and suicidal behaviour. However, in most studies, only levels of total cholesterol were examined and not these of the lipid fractions. In this study, we investigated the relationships between plasma lipid fractions concentrations and the degree of impulsivity and/or depression among suicide attempters.

**Methods:** Thirty-five, non-violent suicide attempters (women 77%) with a mean age of 32.9 ( $\pm 13.4$ ) years were included in the study. Serum lipid concentrations were measured at 8am the next day after the suicide attempt by enzymatic determination. All attempters were assessed concomitantly using the Montgomery-Asberg Depression Rating Scale (MADRS) and the Impulsivity Rating Scale (IRS).

**Results:** The mean total serum cholesterol (TSC) levels of the attempters were 179.08 ( $\pm 37.04$ ), the mean high-density lipoprotein cholesterol (HDL-C) levels were 48.17 ( $\pm 14.00$ ), the mean low-density lipoprotein cholesterol (LDL-C) levels were 111.82 ( $\pm 14.00$ ) and the mean serum triglycerides (STR) levels were 90.60 ( $\pm 46.93$ ) mg/dl. The mean MADRS score was 35.00 ( $\pm 8.61$ ) and the mean IRS score was 10.2 ( $\pm 3.01$ ). We found significant correlations between: a. TSC levels and MADRS scores ( $r=0.38$ ,  $p=0.03$ ), b. LDL-C levels and MADRS scores ( $r=0.50$ ,  $p=0.007$ ), c. MADRS scores and IRS scores ( $r=0.51$ ,  $p=0.001$ ).

**Conclusion:** The results of this study suggest that although there is a strong relationship between depression and impulsivity in suicide attempters only depression scores are related to both total cholesterol levels and to low-density lipoprotein cholesterol levels.

### P161

Depression and suicide risk in suicide attempters

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**Introduction:** Among the commonest risk factors in suicide are depression as well as previous suicide attempt. The purpose of this study is to examine whether there are relationships between depressive symptoms and the degree of suicide risk among suicide attempters.

**Methods:** Suicide attempters (N=35) with a mean age of 32.9 ( $\pm$  13.4) years were included in the study. Depressive symptoms and suicide risk were assessed very shortly after hospital admission using the Montgomery-Asberg Rating Scale (MADRS) and the Scale for Assessing the Suicide Risk of Attempted Suicides (SASR), respectively. For the statistical evaluation, Spearman's rank correlation coefficients were used.

**Results:** The mean MADRS score was 35.0 ( $\pm$  8.61) and the mean SASR score was 4.74 ( $\pm$  1.80). There were significant correlations between the SASR score and the MADRS score ( $r = 0.56$ ,  $p = 0.01$ ). Regarding depressive symptoms there were significant correlations between the SASR score and the MADRS items of apparent sadness ( $r = 0.40$ ,  $p = 0.02$ ), reported sadness ( $r = 0.42$ ,  $p = 0.01$ ), reduced sleep ( $r = 0.41$ ,  $p = 0.02$ ), concentration difficulties ( $r = 0.48$ ,  $p = 0.006$ ), lassitude ( $r = 0.55$ ,  $p = 0.001$ ), inability to feel ( $r = 0.59$ ,  $p = 0.0001$ ), pessimistic thoughts ( $r = 0.41$ ,  $p = 0.03$ ), suicidal thoughts ( $r = 0.38$ ,  $p = 0.03$ ).

**Conclusion:** Awareness of the depressive symptoms of the attempters associated with suicide risk might be useful in a suicide prevention context.

## P162

Self-destructive behaviour in adolescents - A self-report survey among Hungarian adolescent people

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**Aims:** Monitoring medically-treated suicide attempt episodes among young people under 20 years. Conducting an anonymous school-based community study of suicidal behaviour with 15 and 16 year-olds. A definition of self-harm was an act with a non-fatal outcome in which an individual deliberately initiates behaviour.

**Method:** A collaborative study was performed, using an anonymous self-report questionnaire in high schools, simultaneously, gathering data in health care facilities, in Hungary, Pecs, 2002. Prevalence of self-destructive behavior, the related psychopathology (impulsivity, depression, dependencies etc) as well as life events and help-seeking behavior were studied. **Results and conclusions:** A sample of 4408 pupils in Pecs has been analyzed. Comparing the results to other European data, there was remarkable similarity in patterns across countries, despite some noteworthy differences. Decreasing suicide rate (more than 30% from 1985), and a relative low suicide attempt rate were found in Hungary (corresponding to the average in Europe). Relatively high help-seeking activities, (mainly peers), high rate of suicidal ideation - but parallel relative low rate of (mostly overdose) suicide attempts (past year 3% males, 7.2% females) were found. More tolerant, permissive attitudes toward suicide in Hungary may have a particular role, it was possible (according to our adolescent data) to talk about suicidal ideation, however, there is a sizeable proportion of young self-harmers who appear to remain 'hidden'. Prevention and intervention strategies for self-destructive behaviour must continue to be promoted and developed.

## P163

3 year follow-up borderline patients with suicide attempt

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**Significance:** Suicide is a great public health problem. In a suicide attempt population it is especially hard to identify the people who risk committing a completed suicide by recurrent suicide behaviour. Severe self threatening behaviours stamps a bad evolution for personality disorder patients. Furthermore, these attempt suicide patients may suffer a distinct mood disorder or an association between mood and personality disorder.

**Method:** We have conducted a prospective study for a cohort of 102 borderline personality disorder patients who had consulted University General Hospital of Geneva for a suicide attempt between 1999 January and 2001 April. The subjects were in majority women (82.4%) and had a mean age of 31.7 ( $\pm$  11.1). At baseline, we clinically and psychiatrically assessed the subjects. We used Hamilton Depression Rating Scale, DSM-IV clinical features for depression disorder and borderline disorder, and we assessed the suicidal potential too. 3 years later, we proposed an interview to the subjects consenting to the study. This interview included an assessment of depressive disease, suicidal behaviours, the number of hospitalisations and the number of days spent in hospital during the follow-up, the global functioning and DSM-IV borderline personality disorder features.

**Results:** We will present the preliminary reports.

## P164

Epidemiology of suicides in Lower Silesia, Poland

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**Background:** There are considerable differences in suicide rates by nation, nevertheless elderly suicide is an increasing phenomenon worldwide. **Objective:** to investigate characteristics of committed suicides by age in Lower Silesia.

**Method:** Data on suicide victims in years 1999-2001 were obtained from police records. Variables corresponding to sociodemographics of suicides, method employed, place and month of suicide were registered. Attempted suicides were not considered.

**Results:** Total of 1050 suicide victims were recorded within study period (mean age of 44.3yrs). Male:female ratio was 4.8:1. There were 86.6% young (<65yrs) and 13.4% elderly suicides. Young men committed suicide 5 times as often as young women, and old men twice as often as old women. Higher education level was associated with lower suicide risk. Non-violent methods were rare in both age groups. Hanging was the most frequent violent method used, particularly among men. Seasonal distribution of suicides in young and elderly victims didn't differ significantly, however more suicide acts were committed during spring and summer. Suicide rate was lower in Lower Silesia (11.8; in young -11.7, in elderly -12.5) than in general Polish population (15.0/100.000). Among women suicidal rate was twice as high for elderly (6,0/100.000) as for young (3,8/100.000). In case of men, elderly suicide rate (23,6) was higher than young ones (19,6/100.000).

**Conclusions:** The incidence of suicide tended to increase with age, more apparently in women. Suicide was more common among men. Violent suicides were predominant regardless of age and gender.

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**P165**

The Finno-Ugrian suicide hypothesis: Variation in European suicide rates by latitude and longitude

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Many functional mental disorders most probably represent accentuations or dysregulations of normal human traits or misplaced psychological or behavioral strategies. For example, a type of suicidal behavior specific to middle aged men with the so-called atypical depression could represent initial accentuation and later dysregulation of aggressive and impulsive behavior. Male subjects who were more aggressive were better warriors and as such more often rewarded for their actions. Furthermore, the more disinhibited and violent they were the easier it was for them to 'spread' their genes during and after conquering territories. Overall, these traits

had been selected and as such accentuated in some parts of the world. In a more contemporary society, the behavioral manifestations of the same traits have become regarded as pathological, because violent and aggressive behavior is not tolerated anymore. One way out for subjects who inherited these traits is a continuous suppression. It is particularly likely for these traits to escape from control when under the influence of alcohol. Some basis for the above generated hypothesis could be found in our recent study of marked variation of suicide rate in 34 European countries. We regressed the national suicide rate on the capital cities' latitudes and longitudes. The interaction term explained above 40% and almost 30% of men's and women's suicide rate, respectively. This regression model quantifies the Finno-Ugrian suicide hypothesis. The European countries highest in suicide rate constitute a contiguous, J-shaped belt, spanning from Finland to Austria.