

assurance in mental health care institutions. However, at present the qualification of both instruments regarding allocation aspects is questionable.

P01.28

EFFECTS OF NEW ANTIPSYCHOTICS ON SERUM PROLACTIN AND TESTOSTERONE LEVEL IN SCHIZOPHRENIC PATIENTS

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Back ground to Study: The Dopamine-blocking effects and the associated sex hormonal effects of classical antipsychotics in schizophrenic patients have been studied for a long time. The purpose of this study was to investigate sex hormonal effects of new antipsychotics (Risperidone, Olanzapine) in schizophrenic patient treated with clinically relevant doses.

Design: Plasma levels of prolactin and testosterone were measured in 84 schizophrenic patients (28 taking Haloperidol 4–20 mg/day; 27 taking Risperidone 2–6 mg/day; 29 taking Olanzapine 5–20 mg/day).

Result: The prolactin plasma levels of Risperidone group (63.9 ng/ml; 143.7 ng/ml) and Haloperidol group (56.5 ng/ml; 112.5 ng/ml) in male and female schizophrenic patients were higher than that of Olanzapine group (27.5 ng/ml; 36.6 ng/ml). While the testosterone plasma levels of Risperidone female group (0.7 ng/ml) were higher than those of Haloperidol (0.25 ng/ml) and Olanzapine (0.36 ng/ml) female group, but which were all within normal adult average range.

Conclusion: 1. Risperidone, at doses known to be effective in popular clinical setting, influence the plasma prolactin plasma levels higher than that of Olanzapine.

2. New antipsychotics may not influence the testosterone plasma levels.

P01.29

PSYCHIATRY IN INTELLECTUAL DISABILITY: THE "TOOLS OF CARE" IN GENEVA

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Our Units of Mental Development Psychiatry are attached to the Department of Psychiatry in the University Hospitals of Geneva. The aim of our units is to care the population with Intellectual Disability (ID) over 16 without limit in age, presenting a psychiatric trouble and/or needing a psychosocial support.

This population can live in his family or in the different private or public Institutions for Persons with ID. In the population with ID, the presence of psychiatric troubles can vary: different studies give a rate of prevalence from 20% to 80%. Every category of psychiatric troubles could be represented.

For this population, it is necessary a specific net of care. Moreover, it's important to get the more correct as possible diagnostic, the individualised caring and a good collaboration and communication with the partners (families and socio Educational Institution, legal career).

We have organised a "Tool of care" with 4 Sub Units: Ambulatory, Day Hospital, Crise Intervention Staff, Hospital. In this presentation we will show and explain these different subunits and their interaction with the different Partners.

P01.30

ALTERED BIOCHEMICAL BONE REMODELLING MARKERS IN SCHIZOPHRENIA

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Objective: Bone mineral density is decreased in schizophrenia. The aim of this study has been to evaluate biochemical bone remodelling markers in chronic schizophrenia and to evaluate the influence of treatment and clinical features over these markers.

Methods: Serum osteocalcin, parathyroid hormone, bone alkaline phosphatase, telopeptide, collagen type I C-terminal propeptide, crosslaps, 25 hydroxyvitamin D, and cortisol and Interleukin 6 levels were measured in 59 patients suffering from chronic schizophrenia (DSM-IV criteria) and in the same number of sex and age-matched healthy controls. Clinical evaluations included the Clinical Global Impression scale, the Positive and Negative Syndrome Scale, the Disability Assessment Schedule, and information about antipsychotic treatment.

Results: Parathyroid hormone was lower in patients than in controls (mean 31.5 pg/ml s.d. 16.8, vs. mean 35.8, s.d. 16.4, $p = 0.05$). 25 hydroxyvitamin D also was lower in patients (mean 17.2 ng/ml s.d. 9.9, vs. mean 22.0, s.d. 9.2, $p = 0.002$), while telopeptide was higher in schizophrenics (mean 4.2 ug/ml s.d. 1.4, vs. mean 3.3, s.d. 1.1, $p = 0.000$). The rest of the markers were normal compared to healthy controls. Telopeptide inversely correlated with years of evolution of the illness. Treatment and clinical features did not exert any effect over these bone remodelling markers. Interleukin 6 showed a strong negative association with 25 hydroxyvitamin D levels in patients, but not in controls.

Conclusions: The data suggest an increase in bone remodelling due to vitamin D deficiency that induces a release of calcium from the bone and an inhibition of parathyroid hormone secretion.

P01.31

FUNCTIONAL RELATIONSHIP BETWEEN ENZYMES MAOA AND ACE IN HUMAN BRAIN?

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We tried for the first time the relationship between polymorphic sites in genes of two enzymes that are participating in the regulation of the dopamine system.

Monoamine oxidase A (MAOA) is a mitochondrial enzyme which oxidises dopamine, serotonin and other biogenic amines. Angiotensin converting enzyme (ACE) is a part of renin angiotensin system. ACE cleaves angiotensin I to the functional angiotensin II. MAOA and ACE are possible biological markers of vulnerability to neuropsychiatric disorders.

This study group included 49 unrelated Caucasian males from the Czech Republic. Individual genomic DNA samples were extracted from the blood and subsequently used for the PCR detection of the I/D polymorphism of the ACE gene and dinucleotide (CA)_n repeat polymorphism in the second intron of the MAOA gene. We found statistically significant prevalent presence of long alleles of MAOA polymorphism with I allele of ACE polymorphism and presence of short alleles of MAOA polymorphism with D allele of ACE polymorphism (Kruskal-Wallis ANOVA, $p < 0.023$). It is known that intracerebrovascular injection of angiotensin II increases the activity of MAOA in the brain. We propose that

combinations of the studied polymorphisms can participate in the balancing of MAOA activity.

P01.32
SOCIAL FACTORS AND WOMEN'S MENTAL HEALTH IN RUSSIA

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Mental health problems in women must be analysed within a social and cultural context. Transitional period is going on in Russia and this socio-economical situation has brought changes not only in society but also in families which are vulnerable to challenging situations. Social turbulence is leading to growth of violence in families. The problem reflects culturally determined mentality of Russian women who are very patient and tough from early childhood not to show personal feelings in public, Meanwhile domestic abuse against women often results in long term mental health problems, A research has been carried out off the basis of psychiatric and forensic psychiatric assesment of 2 groups of women who had a long history of violence by their husbands. Women of the first group suffered from depression and have committed attempted suicides. Another group of victims of domestic violence responded by killing their husbands. Thus the study reveals psychogenic causes of homocides and suicides in women.

P01.33
EVENT-RELATED POTENTIALS AND NEUROPSYCHOLOGICAL TESTS IN OBSESSIVE-COMPULSIVE DISORDER

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Background: As in previous studies event-related potentials (ERP) have revealed evidence for abnormal cognitive processing in OCD, in this study it was aimed to investigate the cognitive functions of the patients with obsessive-compulsive disorder (OCD) by the help of event-related potentials and some neuropsychological tests.

Methods: Event-related potentials were recorded in a group of thirty one unmedicated OCD patients without depression and thirty normal controls for verbal auditory stimuli in an oddball paradigm. The neuropsychological tests specified for frontal lobe functions were applied in all individuals: Stroop Test, Trail Making Test, Design Fluency Test, Controlled Word Association Test.

Results: The patient group showed shorter P300 duration when compared with normal controls on ERP measures ($p = 0.002$, t -test). No significant differences were found in neuropsychological tests between two groups. Positive correlation was found between Stroop duration and P300 amplitudes in some regions. There was a negative correlation between Stroop duration and the mean P300 amplitudes in occipital ($p = 0.048$, Pearson correlation test), parietal ($p = 0.029$) and temporal anterior regions ($P = 0.016$).

Conclusion: The shorter P300 duration may indicate alteration in cognitive functions as in attention, decision making and going into details.

P01.34
DISABILITY PENSION AMONG PSYCHIATRIC OUTPATIENTS WITH MAJOR DEPRESSION

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Background: Depression is the fourth most important cause of global burden of disability in a recent study by the WHO. Today, depression is the most important single illness leading to permanent disability pension in Finland. We studied to what extent major depression (MD) leads to permanent disability pension and whether any associated factors with being pensioned off exist among the psychiatric outpatients with MD.

Design: A total of 213 adult psychiatric outpatients with first-time documented DSM-III-R MD were retrospectively followed up based on chart reviews with excellent diagnostic kappa-values of 0.92/0.95 (1). Several sociodemographic, clinical and treatment characteristics were detected during the follow-up time of 3 months' medical care. This information was related to official registers of granted pensions with a follow-up time of 30 months.

Results: The mean (sd) age of the patients was 40.8 (11.7) years. Of the patients 58% were women, 22% severely depressed, and 40% received probably inadequate pharmacotherapy according to given dosage and duration (2). Forty-six (22%) patients were pensioned during the 30 month follow-up. In a multivariate survival analysis greater age (≥ 43 yrs, $p = 0.01$), somatic comorbidity ($p < 0.001$), and lowered self-esteem ($p = 0.008$) were associated with being granted a pension.

Conclusions: Work restoration of depressive patients demands careful assessment of risk factors in an early phase of treatment. Especially, lowered self-esteem may be a target symptom of a more hidden nature. It may partly explain why work recovery takes longer than general symptom relief (3). Future prospective research on the effect of longer treatment procedures of MD on work ability is needed.

(1) Sorvaniemi et al. *Psych Services* 1998; 49: 384–86.

(2) Sorvaniemi et al. *Nord J Psychiatry* 1998; 52: 155–61.

(3) Mintz et al. *Arch Gen Psychiatry* 1992; 49: 761–68.

P01.35
AGGRESSION IN MILD RETARDED PEOPLE AS FAMILY PROBLEM REFLECTION

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The actuality of investigation of aggressive behavior of mild retarded young people (MRYP) is determined by unstudying of the problem and serious medical and social consequences such as rising of criminal among MRYP and deep social-psychological desadaptation. 105 MRYP (18–25 years old) and their families were examined by clinical-psychopathological and social-psychological methods, various types of aggressive behavior were as criteria for investigation. Psychological health of families with extracting various types of upbringing was investigated as well. It was revealed that 48 people were brought up in full families with both parents, 15 - in deformed families with mother-in-law or father-in-law and 24 cases were brought up in incomplete family with one of the parent. 17 of them without father. All the families were characterized by conflict interactions, poor living level, low educational and intelligence status of parents. Systematic alcohol abuse was found out in 63 families, a criminal behavior - in 23 ones. The majority in upbringing were hypoprotection and neglecting with the violent attitude with physical punishment. In conclusion we can say that