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 that of Olanzapine.

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

P01.29

PSYCHIATRY IN INTELECTUAL 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

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