

**P0241**

Alteration of body image perception as a side event of antipsychotic treatment in schizophrenic patients

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**Background:** Patients with schizophrenia that are treated with first generation, but also with several second generation antipsychotics, frequently describe negative changes in self-perception and daily activities due to weight gain. A systematic analysis of the weight gain influence over the body image is necessary because it could offer a perspective over the patient's discomfort, improving his/her chances to therapeutic compliance and a better life quality. Psychotherapy, change of antipsychotics, nutritional counselling, occupational therapy or physical exercises scheduling could be solutions to these cases.

**Methods:** A group of 34 patients, 18 female and 16 male, diagnosed with chronic schizophrenia (DSM IV TR), mean age 45.3, treated with antipsychotic agents for at least 2 years (haloperidol 15 cases, olanzapine 10 cases, amisulpride 5 cases, risperidone 4 cases) were evaluated in order to configure a body image profile, using self-reports, investigator-based reports and Draw-a-Person-Test (DAP). Patients included in this evaluation presented a mean weight gain of 10%, reported to their premorbid value.

**Results:** The body image was negative in 82.3% with marked dysfunctional beliefs about self in 64.7%, while the rest of 17.6% had mild to moderate levels of self-blame or hopelessness automatic thoughts associated to weight gain. Only 17.7% patients had a neutral or positive body image, also their mean weight gain was equally to the negative body image group.

**Conclusion:** Negative body image is usually associated to weight gain as a side event to antipsychotic drugs, therefore is important to ventilate the patient's dysphoric feelings and to choose the optimal therapy.

**P0242**

Expression of NR1 subunit of NMDA receptor in schizophrenic hippocampus

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Recent data have suggested an involvement of the N-methyl-D-aspartate receptor (NMDA-R) signalling complex in schizophrenia pathophysiology. Ubiquitously expressed NR1 subunit, existing in 8 spliced variants, is required for the formation of functional NMDA-Rs. Regional, gender and age-dependent differences in the expression of mRNA and protein of NR1 subunit have been observed. As the expression of C-terminal NR1 isoforms is associated with different pathways for synaptic NMDA-R trafficking and targeting, we have measured levels of mRNA (quantitative RT-PCR) and protein of NR1 and splice isoform NR1C2 (western blot) in post-mortem left and right hippocampi of elderly patients with schizophrenia and non-psychiatric controls. In contrast to previous findings, we did not detect significant differences in the mRNA levels for panNR1 subunit between schizophrenia and control group. However, we found

significant changes in the absolute values of the transcripts associated with schizophrenia, but independent on sex. The expression of panNR1 and NR1C2 proteins exhibited sex difference. Higher protein levels were found in the left hippocampi of women (both schizophrenia and controls) whereas in men the levels were higher in the right hippocampus. Also the interactions of laterality and gender were statistically significant. Further comparison revealed significant sex-dependent laterality comparing schizophrenia and control groups. The significance disappeared in women subgroups. The results suggest that hippocampal differences in the expression of mRNA and protein for pan-form and NR1C2 variant of the NMDA-R1 subunit exhibit significant sex-dependence having in mind that the data are limited in the number of patients/controls.

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**P0243**

Influence of personality traits on sexual self-perception and sexual functioning in schizophrenic patients

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Personality traits are an important factor in one's life satisfaction and can therefore influence sexual self-perception and sexual life. Our aim was to determine effects of personality traits on sexual self-perception and sexual dysfunctions in schizophrenic patients.

Research was conducted on 100 schizophrenic patients and 100 healthy individuals. Instruments used: NEO-PI personality questionnaire, Bezinović's questionnaire for sexual self-perception and Arizona sexual experience scale.

Sexual drive and excitement are linked with all personality traits in schizophrenic patients. That means that stronger sexual drive and easier sexual arousal are connected with higher extraversion, pleasantness, consciousness and openness, as well as with lower neuroticism. Among healthy individuals, personality traits don't predict sexual dysfunctions. In schizophrenic patients, personality traits significantly influence all aspects of sexual self-perception except sexual adventurism. However, higher openness is the basis upon which sexual adventurism can be predicted. Pronounced sexual self-scheme is predicted by higher openness and consciousness. Higher openness also predicts higher consciousness of own sexuality. Higher neuroticism is a predictor of negative emotionality and sexual incompetence, and higher extraversion is a predictor of negative emotionality. In healthy individuals, personality traits are predictors of aspects of sexual self-perception. Higher openness and lower consciousness are predictors of more pronounced sexual self-scheme, higher perception of own sexuality and sexual adventurism. Higher openness and lower neuroticism are predictors of higher negative emotionality and sexual incompetence.

We can conclude that personality traits affect aspects of sexual self-perception and sexual dysfunctions in schizophrenic patients and healthy individuals, but their influence differs in certain dimensions.

**P0244**

QOL of paranoid schizophrenic patients

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Goal of contemporary psychiatric treatment is improvement of the quality of life of the mentally ill. Being that quality of life is of special importance for the process and final result of the mental condition, it is very important to identify factors that are responsible for the improvement or deterioration of the quality of life of the patients. Purpose of this research is a discovery of the difference in the quality of life in patients with various type of schizophrenia treated in the hospital environment. QOL was assessed with 30 female schizophrenics classified in accordance with ICD X criteria. LQOLP and BPRS were used. Paranoid schizophrenics treated in the hospital environment have higher objective and lower subjective QOL in regard to other schizophrenics.

## P0245

Bactrim as an adjunctive treatment to toxoplasma-seropositive patients with schizophrenia

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**Background and Aims:** Several studies have shown that the level of antibodies to *Toxoplasma gondii* (*T. gondii*) in schizophrenia is higher than in controls. And it is hypothesized that the neurotropic intracellular protozoan may contribute to the development of schizophrenia. The present study is to explore whether Bactrim, which is effective to *T. gondii*, can help to treat *Toxoplasma*-seropositive patients with schizophrenia.

**Methods:** 99 patients who were positive in IgG or IgM antibody to *T. gondii* were separated into two groups randomly. One group received SMZco tablets (contained 400mg SMZ and 80mg TMP, 6 tablets/d) plus risperidone, and the other group received placebo and risperidone. Both the physicians and the patients did not know whether the patients took SMZco or placebo. The dosage of risperidone was titrated according to the patient's clinical symptoms and the maximum dose is 6mg/d. PANSS scales were used to assess the symptoms before and after treated for 6 weeks.

**Results:** There was no significant difference in the scores of PANSS at baseline and after treatment. The rate of adverse effects, and the ratio of patients who have combined with benzodiazepine and anticholinergic medicine between the two groups did not differ significantly, while two patients in the SMZ group dropped out because of serious nausea and vomiting. The maximum dosage of risperidone in the SMZ group was lower than the placebo group ( $P < 0.05$ ).

**Conclusions:** For toxoplasma-seropositive patients with schizophrenia, Bactrim may be helpful by decrease the dose of the antipsychotic medicine.

## P0246

First rank symptoms in schizophrenia: A cognitive examination of three explanatory models

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**Background and Aims:** The neuropsychological basis of first-rank symptoms in schizophrenia (FRS) is still a matter of debate. Three broad explanatory models for FRS have been proposed, each arising from a different perspective: (i) medial temporal lobes pathology (Trimble, 1990); (ii) reduced cerebral lateralisation and

interhemispheric transfer (Crow, 1997); and (iii) deficits in self-monitoring of intentions due to prefrontal inhibitory dysfunction (Frith et al, 2000). The aim of the study was to test whether patients with FRS would show deficits consistent with the above models.

**Methods:** A broad range of neuropsychological tests were administered to patients with and without FRS and to healthy controls, comprising tests of verbal and nonverbal memory, measures of cerebral lateralisation and interhemispheric communication, tasks of executive functioning, as well as tests of general cognitive abilities.

**Results:** On some cognitive tests, results were supportive of theories advocating reduced cerebral lateralisation and self-monitoring impairment. An unexpected finding was that, on many cognitive tasks, the performance of patients with FRS was better than that of patients without FRS, and not significantly different from that of controls. These results could not be accounted for by demographic features or medication effects.

**Conclusion:** The current study may be the most comprehensive examination of neuropsychological performance in patients with FRS to date. Our results suggest that broad cognitive impairment is not a necessary correlate of FRS.

## P0247

Catechol-o-methyltransferase (COMT) is associated with negative symptoms of schizophrenia

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**Background and Aims:** Genetic variation of the catechol-O-methyltransferase (COMT) gene has long been thought to confer susceptibility to schizophrenia because of its catalytic activity for dopamine degradation. The negative symptom is a severe form of the illness related to prefrontal hypodopaminergia. In the present study, we attempted to perform a quantitative trait test for genetic association between the COMT gene and the negative symptoms in a Chinese population.

**Methods:** A total of 160 unrelated schizophrenic individuals were recruited for genetic analysis and their symptoms were assessed and scored by Positive and Negative Syndrome Scale (PANSS). The quantitative trait test was performed by the UNPHASED program to see the correlation between scored negative symptoms and some single nucleotide polymorphisms (SNPs) present in the COMT gene.

**Results:** rs362204 (Del/Ins SNP) showed allelic association with four negative symptoms, including blunted affect ( $p = 0.00008$ ), poor rapport ( $p = 0.00006$ ), passive/apathetic social withdrawal ( $p = 0.0003$ ) and lack of spontaneity and flow of conversation ( $p = 0.001$ ). The rs165656(C)-rs6267(G)-rs4680 (G)-rs362204 (Del) haplotype was strongly associated with both blunted affect ( $p = 0.0245$ ) and poor rapport ( $p = 0.0186$ ).

**Conclusion:** The present study suggests that COMT may etiologically contribute to the severity of negative symptoms of schizophrenia but its precise mechanism needs further investigating.

## P0248

A family case study on schizophrenia and bipolar disorder: Genotype and Cognition