

**P45.18**

Paroxetine binding in aggressive schizophrenic patients

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Treatment of aggression in schizophrenic patients is a major challenge. We sought to examine the efficacy of augmentation of antipsychotic treatment with pindolol in the amelioration of aggression. Thirty male inpatients meeting DSM-IV criteria for schizophrenia, aged 20–65 years involved in 4 or more aggressive incidents in the two previous months, were enrolled in a double-blind crossover study. Aggression was evaluated per incident, with the Overt Aggression Scale (OAS). Positive and Negative Syndrome Scale (PANSS) was administered at baseline, crossover and at endpoint. Patients received either pindolol or placebo augmentation 5mg X 3/day until crossover, then switched. No significant differences were found in the PANSS scores between the placebo and pindolol treatments. OAS scores were significantly reduced for number of aggressive incidents towards objects and other persons during pindolol treatment (0.59 vs 1.46,  $F=6.09$ ,  $p<0.02$ ; 1.96 vs 3.23,  $F=4.17$ ,  $p<0.05$  respectively). Similar results were obtained for severity of incidents (0.89 vs 3.58,  $F=19.42$ ,  $p<0.0001$ ; 2.89 vs 6.85,  $F=10.11$ ,  $p<0.004$  respectively). Pindolol, with its dual 5-HT<sub>1A</sub> blocking effect ameliorated both number and severity of aggressive acts. Influence on severity may be associated with a 5HT<sub>1A</sub> antagonistic effect.

**P45.19**

Mitochondrial function in neuroleptic-free and medicated schizophrenia

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**Objective:** To assess muscle mitochondrial functions in schizophrenia patients. Neuroleptics have been reported to influence mitochondrial functions. Muscle cell and mitochondrial alterations have been reported in schizophrenia. Schizophrenia has been reported in patients with mitochondrial disorders, which may be due to mutations in nuclear or mitochondrial DNA and cause impaired production of cellular energy, ATP.

**Methods:** Investigations of mitochondrial ATP production rate (MAPR with eight assessments), mitochondrial enzyme activities, and muscle cell morphology were performed in 10 controls, 6 neuroleptic-naive/free and 9 medicated patients. Analyses were covaried for age because of a significant controls-patients age difference.

**Results:** Six MAPRs ( $p<0.05$ , two  $p<0.01$ ) and an enzyme ratio ( $p<0.05$ ) were decreased in unmedicated patients, and one MAPR ( $p<0.01$ ) and an enzyme activity ( $p<0.01$ ) in medicated patients compared to controls. Two MAPRs increases ( $p<0.05$ ) and an enzyme activity decrease ( $p<0.05$ ) were found in medicated compared to unmedicated patients. Non-specific light and/or mitochondrial electron microscopy alterations were detected in 13 patients (87%). Deficiency of stain for the mitochondrial enzyme complex COX was detected in five patients (33%).

**Conclusion:** Mitochondrial involvement in schizophrenia cannot be excluded.

**P45.20**

Schizophrenia patients who smoke have a faster finger tapping rate

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The increased rate of smoking in schizophrenic patients remains unexplained and may reflect attempts at self-treatment. The effect sought from smoking may be related to nicotine's stimulating action. We tested this hypothesis by examining the relationship between smoking status and finger tapping rate, a measure of central processing, in schizophrenia patients treated with atypical antipsychotics. Smokers showed significantly faster finger tapping rates than non-smokers. This was not related to clinical state, illness chronicity, medication side effects, antipsychotic dose or plasma concentrations. Nicotine can improve central processing in medicated schizophrenia patients and this may constitute part of the incentive for smoking.gative symptoms.

**P45.21**

Reversed lateralisation of temporal activation during speech production in thought disordered patients with schizophrenia

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**Background:** Formal thought disorder is a core symptom of schizophrenia. It is associated with a reversed lateralisation of the superior temporal cortex volume, an area which is implicated in lexical retrieval. We investigated the neural correlates of word retrieval during continuous speech in patients with formal thought disorder using functional Magnetic Resonance Imaging (fMRI).

**Methods:** Blood oxygenation level dependant (BOLD) contrast was measured with fMRI while 6 patients with schizophrenia and 6 healthy control subjects spoke about 7 Rorschach inkblots for 3 minutes each. Subjects produced varying amounts of speech during each run. In a within subject design, the number of words produced was correlated with the BOLD contrast in the 2 runs in each participant that showed the highest variance of speech output.

**Results:** In control subjects, the amount of speech produced was mainly correlated with activation in the left superior temporal gyrus. In the patient group, the main correlations were in the right superior temporal gyrus.

**Conclusions:** During the production of continuous speech patients with formal thought disorder show a reversed laterality of activation in superior temporal cortex. This is consistent with findings of perturbed hemispheric interaction in schizophrenia, particularly in patients with formal thought disorder.

**P45.22**

Monitoring of the psychotherapeutic process in the group therapy of schizophrenia

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The development of the psychotherapy of schizophrenia introduces the concept that the patient's autism is a way out of an irreversible

process or narcissistic fixation. If in psychotherapeutic contacts there are elements of autism, it is often a transfer of symbiotic dependence on the therapist. The group therapeutic process leads through interactions and the interpersonal process to interpersonal change, personal autonomy is strengthened and the ultimate objective is externalization towards the world. Continuing Sullivan's concept on psychopathology originating in the interpersonal matrix and Alexander's postulate on correctional emotional experiences, Yalom developed his observation on "interpersonal learning as the essence of the group therapeutic process". Only observation and consensual validation lead to interpersonal self-cognition. Yalom takes interpersonal learning to mean both transfer and insight. In the group therapy of schizophrenic patients in addition to nonverbal communications, verbal communications should be brought close to all members of the group. We could not say that it is justified to speak about the interpretation of conflicts and symbols in the therapy of schizophrenia. It seems that the synthesis of the dissociated patient's personality is primary. The therapist who tries to involve himself in the patient's world to bring the patient gradually back to the world of objects, realities, should in a certain way understand the language of his patients. By using the chronogram according to Murray Cox, the author follows the interpersonal process and interpersonal changes in a small therapeutic group.

#### P45.23

How psychotic are non-psychotic patients?

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**Background:** The objective of this study was to investigate the psychosis continuum hypothesis in patients of an ambulant mental health service and in the general population.

**Method:** 695 patients and 215 controls filled in the Community Assessment of Psychic Experiences (CAPE). The following DSM-IV categories were used in the analyses: 1. Schizophrenia and Other Psychotic Disorders (n=72), 2. Mood Disorders (n=214), 3. Anxiety Disorders (n=63). Patients and controls were compared on the positive, negative and depressive factor of the CAPE with regression analysis.

**Results:** Patients with schizophrenia had the greatest differences in positive psychosis items compared to controls (B=0.48, 95% CI: 0.37-0.58), whereas patients with depression and anxiety had the highest depression symptom scores, and positive symptom scores that were intermediate to that of controls and schizophrenia patients (depression: B=0.26, 95% CI: 0.18-0.33; anxiety: B=0.25, CI 95%: 0.14-0.36).

**Discussion:** Patients scored highest on the factor score that was pathognomic for their diagnosis. However, non-psychotic patients had elevated scores on positive psychosis items, suggesting that the dimension of positive psychotic symptoms varies quantitatively across DSM-IV categories.

#### P45.24

Social functioning and neurocognitive deficit in schizophrenia

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**Objectives:** To determine correlations between neurocognitive deficit and social functioning in schizophrenia and schizoaffective disorder patients and to reveal the possible differences of cognitive profiles of recent-onset and chronically ill patients.

**Methods:** 52 patients diagnosed with schizophrenia or schizoaffective disorder were included in the study. Neuropsychological assessment was conducted by using a scale based on Luria's approach. PANSS was applied for the symptomatology evaluation and an original questionnaire was used to assess social functioning.

**Summary of the results obtained:** Recent-onset patients performed better on the majority of the cognitive tests. Correlations were revealed between neurocognitive and social functioning the patients have shown. Verbal memory was related to all social functioning items examined. The relationships were exposed between cognitive functioning and negative and positive symptoms.

**Conclusions:** The obtained results could be used as a basis for further research and for elaboration of more precise cognitive rehabilitation programmes.

#### P45.25

Psychiatric comorbidity in schizophrenia with obsessive compulsive disorder

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Although a schizo-obsessive subgroup was included in the spectrum of obsessive compulsive (OC)-related disorders, to date there is no study examining the rate of obsessive compulsive disorder (OCD)-related co-morbidity in schizophrenia patients with and without OCD.

**Methods:** We compared first-and recurrent episode schizophrenia patients (43 male 12 female mean age 31.2+ 9.4 years, mean no. of hospitalizations 2.9 + 1.5) with a comparative group (n=55) of non-OCD schizophrenia patients, matched for gender, age and number of hospitalizations. Diagnosis of schizophrenia, OCD, and psychiatric comorbidity was reached by the best estimate approach including SCID-P.

**Results:** 46.7% of the total sample met DSM-IV criteria for at least 1 comorbid disorder. OCD-schizophrenia patients had significantly more OCD-spectrum disorders (body dysmorphic disorder, hypochondriasis, anorexia/bulimia nervosa) than the non-OCD schizophrenia group [10 (18.2%) vs 2(3.6%), respectively, chi square = 4.95, p-value = 0.03]. Inclusion of tic disorders in the analysis, significantly increased between group differences [14 (25.4%) vs. 2(3.6%), chi square = 8.19, p=0.004].

**Conclusion:** Increased OCD-related comorbidity in the schizo-obsessive subgroup may provide additional validation for the OCD-schizophrenia diagnostic entity.

#### P45.26

QLIS – a new schizophrenia-specific quality of life scale

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In the face of an increasing use of quality-of-life (QoL) scales in schizophrenia outcome research there is a pressing need for well-developed, reliable and valid instruments specific to schizophrenic life circumstances and experiences.

Based upon open-ended interviews in 268 patients from different care settings (community, hospital, long-term wards) important components of QoL in schizophrenia were identified. On this qualitative basis items were generated and submitted to a Delphi approach with professional carers of schizophrenic patients.