

less frequently with Quetiapine (QTP) when compared with the conventional neuroleptic haloperidol (Copolov D.L. et al., 2000). The aim of this study was to test the hypothesis that new atypical antipsychotic quetiapine would be effective and safe treatment for adolescents with aggressive behavior

Methods: We have conducted an open-label study with Quetiapine (Seroquel) in the treatment of aggressive behavior in adolescents. The group consisted of 5 men and 7 women. These 12 patients met ICD-10 diagnostic criteria for conduct disorders [F91]. The mean age was 17,1. Global clinical assessment was performed by clinical method and following scales: Clinical Global Impressions – Severity of Illness Scale (CGI-S) and Improvement Scale (CGI-I); Social and Occupational Functioning Assessment Scale (SOFAS-DSM-IV, 1994). The incidence of extrapyramidal symptoms was evaluated through a Rating Scale for Extrapyramidal Side Effects-Simpson-Angus Scale. Assessment of neuroleptic-induced akathisia was conducted with the Barnes Akathisia Scale (1989).

Results: The average duration of aggressive behavior prior to the beginning QTP treatment was 94 days. Adolescents had received a new atypical neuroleptic Quetiapine (25–50 mg/day) 4 weeks. Written informed consent was obtained from adolescents and their parents. The improvement rate [according to CGI and SOFAS] tended to increase with QTP treatment. There was a percentage decrease from baseline to endpoint of 63% in CGI-S scores. For all adolescents in this study QTP improved social and interpersonal functioning (SOFAS>65).

Conclusion: Our data suggest that quetiapine treatment may be effective, safe and well tolerated therapy in adolescents with aggressive behavior.

P07.20

Self-reported prodromal symptoms of adolescents attending psychiatric care

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Objectives: To explore the prevalence of self-reported specific and non-specific prodromal symptoms in a sample of 14–22 years old adolescents attending adolescent psychiatric services in Turku, Finland.

Methods: A short version of PROD-screen (PROD4), a screen for prodromal symptoms, was given to all new patients coming to three adolescent out-patient clinics and two adolescent psychiatric wards in Turku area between January 1, 2002 and June 14, 2001.

Results: 270 PROD-screens were filled (M=103, F=167). The most frequent symptoms reported were anxiety (79.3% of patients), depression (74.4%) and difficulties in thinking (60.7%). Decrease in functioning ability was most frequently reported in school or work performance (64% of patients). 83.3% of patients reported at least one specific symptom and 37.8% reported three or more of them. There was a positive correlation between specific symptoms and decrease in functioning ability (Pearson's $r=0.28$, $p<0.01$), specific and non-specific symptoms ($r=0.47$, $p<0.01$) and non-specific symptoms and decrease in functioning ($r=0.40$, $p<0.01$).

Conclusions: Prodromal symptoms were frequently reported in the questionnaire.

P07.21

Premorbid social adjustment and early-onset schizophrenia course

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The objective of the study was to find associations between the level of premorbid social adjustment and the schizophrenia course and symptoms.

Methods: Premorbid social adjustment (PSA) of 50 DSM-IV schizophrenics with their first schizophrenia episode in adolescence, and psychosocial functioning of 30 healthy controls were measured using the Premorbid Adjustment Scale by Cannon-Spoor. Based on multiple evaluations with PANSS the symptoms' profile and the course of schizophrenia were determined.

Results: We distinguished two groups of patients: with prominent negative and prominent positive symptoms. PSA of schizophrenics with prominent negative symptoms and a chronic schizophrenia course was significantly worse in all life periods ($p<0.001$) compared to PSA of patients with prominent positive symptoms as well as to functioning of controls. The gradual deterioration of functioning in the "negative" group was observed. PSA of patients with prominent positive symptoms and the psychosocial functioning of controls did not differ significantly.

Conclusions: The findings show that a premorbid social maladjustment is associated with a specific symptoms' profile (prominent negative symptoms) and a chronic course of schizophrenia. They suggest that schizophrenia is a pathogenetically heterogeneous disorder.

P07.22

Integrated treatment of aggressive child & adolescent inpatients

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A number of case vignettes reflecting a comprehensive admission process and continual multi-disciplinary team planning with subsequent changes in treatment plans will be presented. The multi-disciplinary team headed by a Child and Adolescent Psychiatrist integrates psychological models of anger management, psycho-educational token system and milieu structure with neuroleptic and mood stabilizing medicines. This model can be well elaborated on a poster or easily presented and discussed in several venues.

P08. Cognition

P08.01

Cortical connectivity disturbances in acute and chronic schizophrenia

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The work is aimed at the study of the connections between different cortical areas in «acute» schizophrenic patients with the duration of the illness not more than two years and chronic ones. Coherence method was used to study cortical connections during performance of the cognitive task, addressed at both hemispheres simultaneously (silent counting of the hours on the imaginary clock dial). It was revealed that the «acute» patients had significantly less interhemispheric connections in anterior cortical areas than the normals in high frequency beta-rhythm. In the chronic patients the deficit of interhemispheric connections in high beta was found in all cortical regions. Obtained in «acute» patients anterior interhemispheric

hypoconnectivity coincided with the cognitive deficit (measured by Luria tests), developing in these patients during the two years after the first episode. More profound functional disconnection of the hemispheres in chronic schizophrenic patients accompanied the progressing of the process, these disconnection being partly reflected in the name «schizoz».

P08.02

Is critical flicker fusion a trait marker?

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Objectives: Critical Flicker Fusion (CFF) has essentially been used as a cognitive function measure. However, its interest as a trait marker seems a bit forgotten. Our study tries to explore this topic.

Methods: Eight F-16 jet pilots were recruited and their cognitive function was thoroughly evaluated before and after a cognitive activation task. The task comprised a 90 minute sequence of emergencies in a flight simulator. The following evaluations were performed: Spatial Recall Test (SRT), Paced Auditory Serial Addition Test (PASAT), Leeds Psychomotor Test Battery (which provides choice reaction times and CFF) and the Vienna Test Battery (VTB). The Wilcoxon test and the Pearson's correlation were employed.

Results: The overall measures varied quite differently with one exception – CFF. The differences were not significant (CFF before: mean: 28.07±2.90; CFF after: mean: 28.07±2.74). The correlation obtained was $r=0.953$ which implies a shared variance of 90.8%.

Conclusions: This result indicates that each pilot provided a very similar result in both evaluations. Our study could reflect a possible trait marker property for CFF, although new studies are needed to better clarify our findings. That does not mean that CFF is not vulnerable to exogenous factors like psychotropic drugs.

P08.03

Emotion recognition deficit and cognition in schizophrenia

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Objectives: Previous investigations have found impaired recognition of facial affect in schizophrenia. Controversy exists as to whether this impairment represents a specific emotion recognition deficit or whether impaired processing of emotion is part of a general cognitive decline. We compared patients and healthy control subjects on computerized tasks of emotion. Emotion processing deficits were correlated with neurocognitive performance.

Methods: 40 patients (25 male, 15 female) with schizophrenia (DSM-IV, treated with atypical neuroleptics) and 40 healthy volunteers, matched for age and gender, underwent computerized tasks of emotion (Penn's Emotion Acuity-, Differentiation- and Facial Memory Tests); all participants were assessed neuropsychologically.

Results: Patients with schizophrenia performed worse than control subjects on emotion recognition. We found higher error rates for identification of emotion in happy faces ($p<0.02$) and female faces ($p<0.01$) and for differentiation of sad versus happy faces ($p<0.001$). In schizophrenic patients, emotion recognition correlated with attention ($p<0.01$) and executive function ($p<0.001$).

Conclusions: The study did not reveal a specific deficit for emotion recognition in schizophrenia. These findings lend support to the concept that emotion recognition is associated in schizophrenia with key cognitive deficits.

P08.04

Does antidepressant therapy improve cognitive function in elderly depressed patients?

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Objectives: Depression in late life is often associated with cognitive and psychomotor deficits, and may be a risk factor for subsequent dementia. In addition, depression is frequently comorbid with dementia. Despite these data, there is a relative paucity of well-controlled studies of adequate duration comparing different antidepressant strategies in elderly depressed patients with and without cognitive impairment. In this report, we used data from two multicenter trials to analyze the effects of antidepressant therapy on cognitive functioning in late life depression.

Methods: 446 subjects 60 years or older (75% ³ 65 years), with DSM-III-R major depression participated in two randomized multicenter trials of 12 week duration. The first compared sertraline (range 50–100 mg) to fluoxetine (20–40 mg) and the second compared sertraline (range 50–150 mg) to nortriptyline (25–100 mg). Cognitive assessments included a Shopping List Task (SLT), the Digit Symbol Substitution Test (DSST), and the Mini-Mental State Exam (MMSE).

Results: Sertraline and fluoxetine, and sertraline and nortriptyline were equally efficacious in reducing depressive symptoms in the primary efficacy analyses. Treatment with sertraline had more positive effects on verbal learning and recall as well as on visual tracking, coding and motor performance than nortriptyline ($p < 0.05$ for all comparisons).

Conclusions: These data will be discussed in relation to the growing links between late-life depression and dementia.

P09. Comorbidity in psychiatry

P09.01

Dementia with delirium caused by vitamin B12 deficiency

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An association of different psychiatric and neurological symptoms with vitamin B12 deficiency is well accepted. Vitamin B12 is a key component in the catabolism of monoamines. B12 deficiency is associated with various neuropsychiatric disorders and may be more frequent in psychiatric inpatients. Different investigators have discussed the involvement of B12 deficiency in psychiatric manifestations mainly among elderly people. The authors describe a case report of relatively young patient (52-year-old) with organic psychosis secondary to vitamin B12 deficiency. No clinical features and laboratory data of anemia were observed. The electroencephalogram revealed generalized slow-wave activity. Psychotic symptoms were resolved only with B12 and folate replacement via monthly B12 injections, and his electroencephalographic reading returned to the normal limits. The four-months follow-up after the patient's discharge from the hospital revealed stability in his mental status. It is noted that organic mental changes were reversible with B12 and folate replacement. The authors propose that determination of serum vitamin B12 and folic acid levels should be recommended as routine screening in all new admissions of psychiatric patients irregardless to their age and previous state of health.