(Brief Psychiatric Rating Scale, BPRS), Global Assessment of Functioning (GAF) current overall functioning, Patient Evaluation of Medication (PEM) and safety (Clinical Global Impression of side effects (CGI-se) and Patient Global Impression of side effects (PGI-se) were measured at baseline and after 6, 14 and 26 weeks. Statistical methods used are t-tests for related samples. Percentage changes are expressed as relative to the maximum change possible.

Results: As this study is in progress preliminary results are reported over 19 patients, and are only available for change at week 14 compared to baseline. Mean improvements turned out to be 20.8% in SWN ($p = 0.012$), 24.8% in BPRS ($p = 0.002$), 5.4% in GAF ($p = 0.004$) and 58.8% in PEM ($p = 0.002$). Regarding side-effects, the mean improvements were 62.2% in CGI-se ($p = 0.009$) and 38.7% in PGI-se ($p = 0.042$).

Conclusions: Patients rated their subjective experience with olanzapine significantly superior to their previous AP. Their overall well-being and symptomatology improved significantly as well as their current overall functioning. Side effects were significantly better tolerated. Patients indicated to prefer olanzapine treatment over their previous AP.

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THE USE OF THE ATYPICAL ANTIPSYCHOTIC OLANZAPINE IN SCHIZOPHRENIA

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During the past decades, efforts have been undertaken to develop antipsychotics which combine an antipsychotic effect and a profile of low extrapyramidal side effects. Two major classes of atypical antipsychotic compounds have become available, the 5-HT/DA antagonists with strong $5\text{-}HT_{2a}$ relative to DA_2 receptor blocking properties of which risperidone is the main representative (Verhoeven et al., 1997) and the group of clozapine related drugs that affect various DA and 5-HT subreceptor systems such as olanzapine and sertindole.

In the present study the effect of olanzapine in a flexible dose from 5 to 20 mg daily was investigated on the schizophrenic symptom profile and 5-HT plasmaparameters. In an open, prospective study lasting 14 weeks, the efficacy of olanzapine on positive and negative symptoms was assessed by means of the PANSS and the CGI including a total of 20 patients suffering from either an acute type of schizophrenia or an acute episode, a relapse after symptom free interval or an exacerbation of chronic illness.

Preliminary analyses revealed a reduction of both positive and negative symptoms in a majority of the patients included, albeit the effect seemed to be more pronounced on negative symptoms. Major side effects comprised weight gain and fatigue, not necessitating premature discontinuation; extrapyramidal side effects were not observed.

(1) Verhoeven WMA, Rijn-van den Meijdenberg JCC, Hofma E, Tuinier S, Fekkes D, Pepplinkhuizen L. Amino acids, norharman and serotonergic parameters in schizophrenia: clinical and biochemical effects of treatment with risperidone. New Trends in Experimental and Clinical Psychiatry, 13: 117–126; 1997.

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SERTINDOLE IN THE TREATMENT OF SCHIZOPHRENIA

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Subjects: 9 patients who fulfilled the DSM-IV criteria for schizophrenia, schizophreniform disorder or schizoaffective disorder and gave informed consent. Mean age (± SD) was 28.8 (± 5.4) years.

Methods: We openly treated the patients with sertindole (SRT). No other antipsychotic drug was used. The average dose of SRT was 17.1 (± 5.1) mg/day. Mean length of treatment was 3.7 (± 4.3) months. Two patients were treated with SRT alone, and 7 patients were treated with SRT in combination with benzodiazepines (N = 5), carbamazepine (N = 2), valproate (N = 1), lithium (N = 1), gabapentin (N = 1), and paroxetine (N = 1). The t-test was used for comparison between assessment on admission and at the last evaluation.

Results: On admission, the patients received the following mean (± SD) scores: CGI: 6.2 (± 0.4), BPRS: 34.7 (± 15.8), SAPS: 43.1 (± 30.3), SANS: 46.6 (± 22.0), GAF: 26.0 (± 7.4). At the last visit, patients had a significant mean improvement on the CGI (4.8 ± 1.6; $p = 0.017$), and the GAF (37.8 ± 11.3). Improvement on the BPRS was marginally significant (19.7 ± 17.9; $p = 0.078$). There was a numeric (but not statistically significant) improvement on the SAPS and the SANS. We observed no acute dystonic reaction. Rigidity, akathisia and other specific parkinsonian signs were absent or minimal. Three patients had a significant akinesia. However, the treatment with SRT improved this sign in all of them, suggesting that akinesia was a primary negative symptom and not a drug side effects in such patients. One patient treated with SRT (20 mg/day) in association with lithium (900 mg/day) showed a severe, diffuse, high frequency, irregular tremor which did not improve after withdrawal of lithium and SRT. Furthermore, we observed nasal congestion (N = 2), somnolence (N = 4), absence of ejaculation and reduced libido (N = 3), ventricular premature complexes (N = 1), and weight gain (N = 5) (Kg: 12, 8, 4, 9, 5).

Discussion: In this sample, SRT was effective against both the positive and negative symptoms of schizophrenia spectrum disorders. Neurological side effects were absent or minimal. Absence of ejaculation and weight gain were the most serious treatment-emergent adverse events.

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THE CARDIOVASCULAR SAFETY PROFILE OF SERTINDOLE. PRELIMINARY DATA

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Objective: Cardiovascular safety of Sertindole, an atypical antipsychotic patented by H. Lundbeck, has critically been discussed because in some patients Sertindole may induce a slight prolongation (about 5%) of the QT-interval in the ECG. A similar QT-prolongation is well known from class IA/III antiarrhythmic drugs. Excessive prolongation of the QT-interval especially in combination with pre-existing certain heart diseases, electrolyte disturbances (K, Mg) and bradycardia increases the likelihood of the development of ventricular tachycardia (Torsades de pointes). However, bradycardia is not known to be part of the clinical profile of Sertindole. In addition the drug binds with relatively high affinity to alpha-1-adrenergic receptors. This may exert an inhibitory effect on some arrhythmogenic mechanisms. Nevertheless, another important (and unfortunately often overlooked) aspect to assess

https://doi.org/10.1016/S0924-9338(99)80638-5 Published online by Cambridge University Press

the cardiovascular safety of a psychopharmacological agent is its potential influence on autonomic neurocardial function (ANF).

Methods: We therefore routinely evaluate ANF assessed by serial standardised measurements of heart rate variability (HRV; 1) in schizophrenics, who are treated with Sertindole (baseline, 4 mg, 8 mg, final dosage).

Results: Preliminary data obtained from the Sertindole treated group demonstrated a reduction of the LF/HF power ratio suggesting a decrease of sympathetic arousal. Moreover, there were no pathological reductions in those variables known to reflect parasympathetic activity (e.g. CVr, RMSSDr or high frequency power).

Conclusion: The integrity of the autonomic nervous system (ANS) may be important in the prevention of cardiac arrhythmia and reduced vagal efferent activity may favour cardiac electrical instability. Indeed, survival studies of patients with diabetes, chronic alcoholism or myocardial infarction indicate a higher mortality rate due to cardiovascular causes in those patients with cardiac vagal dysfunction. Sertindole only has a low or negligible affinity for alpha-2-adrenergic or cholinergic receptors and, thus, may not cause substantial disturbances in ANS functioning. Our preliminary clinical data are in accordance with these theoretical implications.

(1) Task Force Report of the European Society of Cardiology. Heart rate variability. Circulation 1996; 93: 1043–1065.

Wed-P80

OBSERVATION OF PHYSICAL DEVELOPMENT INHIBITION OF CHILDREN TREATED IN PSYCHIATRIC HOSPITAL

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The purpose of the present study was to investigate the physical development of schoolboys treated in psychiatric hospital.

For investigation were chosen schoolboys, who were treated as inpatients in Tartu University Psychiatric Hospital from year 1994 to 1997. All boys were investigated during their being in children's ward. They had different nonpsychotic disorders diagnosed according to ICD-10 criteria.

Anthropological investigation was carried out by rules of R. Martin (1957) and Heath-Carter (1968, 1990) recommendations. The height and weight of boys were evaluated with physical development scales for Estonian schoolchildren by J. Aul (1978) and R. Silla (1984). The nutritional status was evaluated by A.R. Frisancho's (1981) standards for male. Altogether data of 255 inpatient boys were used. We divided our material to subgroups: organic disorders, mood, neurotic, mental retardation, psychological development and behavioral disorders with onset in childhood. Chi-square criteria were used for evaluating differences in subgroups.

Mean age of boys was 11.4 + 2.6 years. The height below 50 percentile was observed in 66 percent of investigated boys ($p < 0.05$). The weight below 50 percentile was observed in 80 percent of treated boys ($p < 0.001$). The arm circumference below 50 percentile occurred in 75 percent ($p < 0.001$) and triceps skinfold thickness below 50 percentile in 80 percent ($p < 0.001$) of psychiatrically treated inpatients' boys.

Psychiatrically treated boys were frequently with physical development inhibition. Complex psychosocial rehabilitation should contain also physical rehabilitation.

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QUANTITATIVE ASSESSMENT OF MOTOR ACTIVITY IN STRUCTURED SITUATION IN CHILDREN WITH ADHD

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ADHD may not be discernible in all situations, and signs of this disorder may not be obvious at home or in a clinicians office. The most accurate measures of hyperactivity have used portable electronic actigraphs, however this method is quite expensive and difficulty accessible in East Europe. The simpler and cheaper method is direct observation of global motor activity in test situation as sitting, but the results rare different according to observator. We try to evaluate the cheap screening method of assessment of motor activity using video-camera.

50 children aged 8–12 (25 with DSM-IV diagnosis of ADHD and 25 healthy controls matched according to age and sex) were videotaped during 15 minutes of fixed sitting. The motor activity of the head, trunk and limbs and total motor activity was assessed by 2 independent researchers using the video-tape.

Analyses were conducted in order to evaluate the differences in number and type of movements between groups. Correlations between results of this examination and Conner's Rating Scale and clinical diagnosis according to DSM-IV and ICD-10 (ADHD subtype and severity) were also analysed.

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STATE AND TRAIT ANXIETY AND DEPRESSION IN MOTHERS OF CHILDREN WITH ADHD

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In recent years some researches were done on the associations between attention deficit hyperactivity disorder (ADHD), affective disorder and anxiety disorders. The high prevalence of depression and anxiety was found in relatives of ADHD children, however the results are sometimes contradictory. To estimate the anxiety and depression level in mothers of ADHD children and mothers of healthy controls, we examined 22 mothers of children with DSM-IV diagnosis of ADHD and 22 mothers of healthy controls using the Polish versions of the State and Trait Anxiety Inventory and the Beck Depression Inventory. Short structured personal interviews were also done. Analyses were conducted in order to evaluate differences in age, family history, education, occupation, general health status between both groups.

We analyzed also the associations between the level of anxiety and depression in mothers and level of hyperactivity and conduct problems in children estimated by parents, and the DSM-IV and ICD-10 criteria for ADHD and conduct disorder (CD) as well.

The mothers of hyperkinetic children exhibited higher levels of depression and anxiety. The level of depression might have an influence of mother opinion about her child and it should be taken into consideration in the clinical examination.

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THE LONG-TERM COURSE OF CHILDREN WITH ADHD TREATED WITH CENTRALSTIMULANTIA

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Objective: To study the long-term course (10–25 years) of children who have been diagnosed with attention-deficit-hyperactivity-