

In 12 patients a moderate to marked improvement in all domains was observed upon treatment with 20–40 mg citalopram daily. Treatment for one year in the effective dose prevented recurrence of depressive symptomatology.

It is concluded that citalopram is a well tolerated, safe, interaction-free and effective antidepressant in mentally retarded subjects with a depressive disorder.

#### P46.05

Smoking modulates neuroendocrine responses to ipsapirone in patients with panic disorder

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**Objective:** Reduced 5-HT<sub>1A</sub>-receptor responsiveness has been reported in patients with panic disorder and/or agoraphobia (PDA). Although many of these patients are regular smokers, it has not been examined whether psychological or neurobiological effects induced by the highly selective 5-HT<sub>1A</sub>-receptor agonist, ipsapirone, are affected by the smoking status of the patients.

**Methods:** In order to clarify this question neuroendocrine challenges with oral doses of ipsapirone (0.3 mg/kg) and placebo were performed in 39 patients with PDA, and results were compared between smokers and non-smokers for at least two years (n=22).

**Results:** Patients who were smokers (but did not smoke during the challenge procedure) had significantly reduced baseline concentrations of cortisol; they also showed significantly higher cortisol responses to ipsapirone than non-smokers.

**Conclusion:** Smoking status has to be taken into account when assessing the responsiveness of 5-HT<sub>1A</sub> receptors in patients with psychiatric disorders.

#### P46.06

Relation between sexual dysfunctions and CYP 2D6 activity

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The aim of the study was to establish to the difference, as to the frequency and severity of side effects related to sex-life, between patients treated by paroxetine with reduced CYP 2D6 metabolic capacity and patients who showed no such changed capacity. Data were obtained from 30 patients with informed written consent treated by paroxetine for 131.4 days. The average daily dose of paroxetine being 20.8 mg. The effect of treatment on the sexual function was recorded by ASEX and the UKU scale. The difference of sexual dysfunction incidence between extensive and poor metabolizers broken down into the items of the scales used was subjected to statistical evaluation by the Mann-Whitney test. The CYP 2D6 metabolic status was determined with the dextromethorphan test (phenotype) and the allele-specific PCR (genotype). It may be summed up that most patients (24) undergoing long-term treatment by paroxetine reported sexual dysfunction. Subjects with low CYP 2D6 activity probably due to the long-term administration of paroxetine reported statistically significant more frequent sexual dysfunction in the ASEX scale.

Supported by grants IGA MH CR: NF 6169–3/2000 and CEZ: J07/98: 141100001.

#### P46.07

A rare case of neuroleptic malignant syndrome and the NMS spectrum concept

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Neuroleptic malignant syndrome is an uncommon but potentially fatal complication of neuroleptic treatment. We describe a rare case of NMS diagnosed in a 18-year old man after a rapid escalation on neuroleptic dose. The patient developed the cardinal features of the syndrome gradually over a period of 15 days. The rather slow presentation was followed by an extremely prolonged course with rigorous treatment, including assisted ventilation in an intensive care unit extending over 3,5 months. The failure of more conventional modes of treatment imposed the use of electro-convulsive therapy. The final outcome was surprisingly positive with complete recovery of the NMS. Furthermore the patient's mental status and functioning remained intact over the last five years. This case raises interesting issues on neuroleptic toxicity lending credence to the spectrum concept of NMS.

#### P46.08

The effect of olanzapine on dopamine receptor responsivity in schizophrenia

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A neuroendocrinological method to check the degree of dopamine receptor blocking is by measuring the prolactin (PRL) responses to acute (i.m.) administration of haloperidol (HAL). The authors applied this test in a group of male patients with DSM-IV schizophrenia in the drug-free state. The patients were subsequently treated with olanzapine (OLZ) (mean daily dose: 22.5±5.8) and the test was repeated 6 weeks later. For the Hal-test, 5mg HAL were injected i.m. and blood samples were taken at times 0, 30, 60, 90 and 120 minutes. Fourteen patients enrolled in the study. Psychopathology was assessed by means of the Brief Psychiatric Rating Scale (BPRS).

Six weeks treatment with OLZ resulted in significant decreases in the total BPRS score and on the score of its subscales for positive, negative, and general psychopathology. Comparison of the PRL response patterns, after HAL administration by analysis of variance for repeated measures (ANOVAR) for drug treatment and time, revealed a highly significant time effect (F=28.98, p=0.000) and a significant treatment by time interaction (F=8.27, p=0.000008). Namely, in the drug-free state significant increases were found in the PRL levels after i.m. HAL administration which were significantly reduced during treatment with OLZ, indicating moderate receptor blockade.

#### P46.09

Psychopharmacotherapy or psychotherapy of anxiety disorders – one year results

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The purpose of our one-year study was a comparison of psychopharmacotherapy and psychotherapy of acute outpatients with anxiety disorders during crisis periods.

**Patients and methods:** 20 patients/DSM-IV and ICD-10 classifications used hydroxyzin and psychotherapy for 12 weeks.

**Results and Conclusion:** We compare our one-year experience with treatment of outpatients with anxiety disorders. After a short time therapy the effect was significant – the improvement of the of the clinical symptoms and successful come back to every day life activities. Patients, that have finished their treatment by alliance, were without benzodiazepins and treatment without relevant psychotherapy. Combination of psychopharmacotherapy and psychotherapy results in decreasing of clinical symptoms of anxiety disorders.

#### P46.10

Synthesis of endogenous ethanol during treatment of alcoholic dependence

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Decrease of basic level of blood endogenous ethanol is observed at patients suffering alcoholic dependence especially in the period of abstinence. The level of alcoholic motivation is in the reverse dependence with the content of blood endogenous ethanol. Precursor of endogenous ethanol is pyruvic acid from which acetylated aldehyde is formed and quickly reduced to endogenous alcohol. Sufficient concentrations of lactate inhibit conversion of sodium pyruvate into lactate and direct the reaction to formation of endogenous ethanol. The patients were treated per oral with sodium pyruvate in combination with phosphotiamine, magnesium sulfate and potassium lactate. This treatment normalized metabolic processes disturbed as a result of alcohol abuse and restored synthesis of endogenous ethanol. The use of dichotomous emotiogenic test revealed more marked influence of sodium pyruvate on posterior parts of both cerebral hemispheres and predominantly correcting influence on the structures of right cerebral hemisphere.

#### P46.11

Creatine kinase levels during treatment with atypical antipsychotic agents

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Marked elevations of serum creatine kinase (SCK) have been associated with treatment with both typical and atypical neuroleptic agents.

**Objectives.** The purpose of this paper is to report preliminary data concerning the frequency of SCK elevation in patients treated with atypical neuroleptics in comparison with a group receiving typical neuroleptic drugs.

**Methods.** Before the initiation of neuroleptic therapy (clozapine [n=11], olanzapine [n=9] and risperidone [n=13], haloperidol [n=6] and perphenazine [n=8]) CK levels in peripheral blood was determined. Blood sample for CK determination was also collected at weeks: +1, +2, +3, +4, +8, +12. Treatment compliance was periodically assessed using the reports of nursing staff.

**Results:** About 4% (n=2, one with clozapine and one with perphenazine) of patients was found with elevated SCK levels above upper normal limits (290 IU/L and 345 IU/L).

**Conclusions:** The rate of frequency of SCK elevation in patients treated with neuroleptics that was found in our sample is compatible with previous reports (2–10%). In the present paper, the role of atypical as well as typical antipsychotic agents in producing SCK

elevations, its' magnitude and pathophysiological significance and the ways of its' further study will be discussed.

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#### P46.12

Alteration of hormone status during the treatment of risperidon

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**Objective:** To study of hormone status peculiarities of the patient's who under risperidon therapy.

**Method:** Enzyme immunoassay, clinical-psychopathological.

**Results:** There was examined 16 patients (8 men and 9 women) with diagnosis of paranoid schizophrenia that had anti-psychotic treatment of risperidon during three weeks in the dose of 4 mg a day. The taking of blood for estimation of hormone level (prolactin, testosterone, T3, T4, TSH) made three times: before the administration of risperidon, on 10 and 21 day of it's taking. The blood took from 9 to 10 A.M. on an empty stomach.

31% of patients has shown the rise of TSH level (1,23  $\mu$ IU/ $\mu$ l before the beginning of therapy and 3,43  $\mu$ IU/ $\mu$ l on 21 day of it). At the same time there was no significant changes of T3 and T4 levels.

All of the men from the study group have shown noticeably increase of prolactin level (1496 IU/l) on the 10 day of beginning risperidon therapy in comparison with the basic level (343  $\mu$ IU/l). On 21 day of therapy the prolactin level has already high (1639  $\mu$ IU/l). Testosterone level during the treatment has decreased with 19% of men (from 17 nmol/l before therapy to 7 nmol/l on 21 day of therapy). The women before therapy had mean level of prolactin 420  $\mu$ IU/l, on 10 day 2130  $\mu$ IU/l, on 21 day 3150  $\mu$ IU/l and there was no significant changes of they testosterone levels.

**Conclusions:** Risperidon therapy brings about the noticeably increase of prolactin level. Re-reduction of testosterone level of part of male patients could be explain by the influence of hyperprolactinaemia which get broken pulsate secretion of FSH. The fact that some kind of pa-tients have the rise of TSH could be explained by risperidone's influence on serotonergic and dopaminergic systems which exert significant influence on the TSH's secretion.