

**P02.279****THE CARDIOVASCULAR SAFETY PROFILE OF AMISULPRIDE IN MAN: RESULTS OF AN OPEN CLINICAL STUDY**

M.W. Agelink\*, F.X. Eich, E. Klieser. *Dept. of Psychiatry, University of Bochum and Sanofi-Synthelabo, Berlin, Germany*

**Background:** Compared to classical neuroleptics amisulpride has been shown to be more effective in treating negative symptoms of schizophrenia. Moreover, it induces only low or negligible extrapyramidal side effects. Concerning this clinical profile it should be regarded as an atypical neuroleptic. In vitro studies indicate that amisulpride acts selectively at D<sub>2</sub>- and D<sub>3</sub>-receptors. Concerning its in vitro receptor profile, no significant anti-adrenergic and anticholinergic properties should be expected in vivo.

This study 1); prospectively investigated the effects of amisulpride on autonomic neurocardiac function and ECG time relations and 2); reviewed ECG data available from large pre-clinical and clinical studies of amisulpride.

**Methods:** In an open clinical study 49 schizophrenics underwent serial ECG recordings during a dosing-up phase of amisulpride up to a maximum dosage of 800 mg/d. To assess the effects of amisulpride on autonomic neurocardiac regulation a subgroup of these patients additionally underwent standardized measurements of heart rate variability (1) at rest and during various provocation manoeuvres.

**Results:** The results of the HRV study indicate that amisulpride had no anti-muscarinic properties in vivo. Under amisulpride initially untreated schizophrenics developed a reduction of both, the mean 5-min resting heart rate and LF/HF ratio, suggesting a trend towards normalization of the neurocardiac sympathovagal balance during treatment. Further ECG analysis revealed that amisulpride did not significantly influence electrocardiographic repolarization (ST-segment, T-wave morphology, mean QTc-times) and PQ-conduction.

**Discussion:** Taken together our data indicate that in vivo amisulpride (400–800 mg/d) is well tolerated by the cardiovascular system.

(1) Task Force Report. Heart rate variability. *Circulation* 1996; 93: 1043–65.

**P02.280****TESTOSTERONE, AGEING AND COITAL ACTIVITY**

S. Pietrucha\*, J. Raboch, J. Raboch. *Charles University, 1st Medical Faculty, Department Psychiatry, Prague, Czech Republic*

The aim of the study was to determine the correlation between the level of testosterone and coital activity in a group of 85 healthy men, 77 patients with Klinefelter's syndrome and 55 patients with varicocele; all of them were married and aged 22–45 years. Evaluation of plasma testosterone levels revealed that its levels were significantly decreased ( $p = 0.0001$ ) in Klinefelter's group (mean = 4.21 ng/ml) and in varicocele group (mean = 5.72 ng/ml) in comparison with healthy men (mean = 9.49 ng/ml). Coital activity was examined using a structured interview and the Sexual Activity of Men questionnaire. In subgroups aged 36 and more the subnormal values of sexual activity were found in 67% of chromatin positive men, in 36% of patients with varicocele and only in 24% of controls. Testosterone levels do not decrease significantly with age in any of the studied groups and there was no correlation between the levels of testosterone and the coital activity.

**Conclusion:** Plasma levels of testosterone in adulthood age don't probably play a decisive role in the decline of male coital activity in

the period between 22–45 of age. Other factors such as enzymatic, neurogenic, sociopsychogenic and especially vascular ones might be of importance.

**P02.281****FUNCTIONAL MAGNETIC RESONANCE IMAGING OF REACTION TO FOOD PRESENTATION IN ANOREXIA NERVOSA**

U. Rudolf\*, P. Hana, O. Jiří<sup>1</sup>, K. Jan<sup>1</sup>. *Charles University, 1st Faculty of Medicine, Psychiatric Department; <sup>1</sup>Department of Neurology, Prague, Czech Republic*

Food phobia is a core component of anorectic pathology and the perception of food may be as distorted as the perception of the body shape in eating disorders. Anorectic patients differ as to the kind of feared food, energetic value being not necessarily the decisive quality. That is why we decided to select the kind of presented food individually.

8 anorectic inpatients and 4 healthy controls were asked to choose one colour picture of food, they would feel comfortable to eat, and one colour picture of food, they found unpleasant or detestable. Then functional magnetic resonance imaging was performed, using the BOLD technique, while the food pictures were presented with an accompanying instruction to think of eating the food. In an easy paradigm watching the picture alternated with looking at an empty wall. T2\* EPI images were collected. Transfer into a PC enabled computation. T1W transversal images served for precise pixel to pixel transfer of the results in colour. EDI questionnaire and subjective scales were used to specify the individual eating attitudes and immediate feelings at the moment of food presentation. In anorectic patients results suggest generally more activation with picture of unpleasant food. Cortical activity was detected in frontal lobes, more often left than right, with anterior cingulate gyrus often involved in both groups. Occipital cortical activity mirrored visual perception of the paradigm. Occasional presence of activation was detected in basal ganglia, insula and hippocampus, more often left than right. The considerable variability of results among both patients and controls implies the need for larger sample studies with further improvement of the paradigm and effective motion artefact elimination.

**P02.282****THE PREVALENCE OF DEPRESSION IN THE CZECH REPUBLIC**

D. Vanek\*, J. Raboch, J. Vanek<sup>1</sup>. *Psychiatric Clinic I. Med. Fac. Ch. U., Prague; <sup>1</sup>Private Psychiatric Practice, Czech Republic*

Depressive disorders represent a considerable economical, health and social burden for patients as well as for the whole society. In last decades the prevalence of depression has increased. In November 1999 a study was conducted to investigate 6 month prevalence of depressive symptoms in a representative sample of the Czech population and to map their intensity and quantify their consequences. The study used the DEPRES methodology. 1248 respondents aged over 15 years were assessed by structured interview focused on pathological mood changes, their impact on daily activities, suicidal thoughts, contact with health professionals and social status. Results showed that 33% of the sample met the DEPRES criteria for depression, mostly severe depression (16%). Secondly, we found the depressive symptoms in 14% of respondents and mild depression was found in 3%. Most frequent depressive symptoms were found in the cohort of 35–44 years of age. Aider 65 years the prevalence increased again. Women