and to determine the effects of sociodemographic and disorder related factors on sexual functions.

Method: In a national based survey, 827 patients from 50 centres were evaluated by Clinical Global Impression of Severity (CGI) scale, UKU side effects rating scale, The Arizona Sexual Experience Scale (ASEX; for males and females).

Results: Sixty six % of the patients were male (mean age: 33.1±7.4 years). Mean schizophrenia duration was 8.7±6.3 years. Disorder severity was mild (39.8%) to moderate (34.3%). No questions about their sexual life were asked to 72.3% of patients during previous psychiatric examinations. While 45.9% of the patients found their sexual life adequate before schizophrenia this ratio declined to 16% after the disorder; the percentage of patients who found their sexual lives inadequate increased from 15.7% to 37.2% ($p < 0.001$). Total scores (TS) of ASEX was 19.1±6.4 for women, and 16.0±5.1 for males ($p < 0.001$). Patients from higher income group had significantly lower ASEX-TS (14.7±4.9) compared to low or medium income groups (17.4±5.9 and 17.1±5.7, respectively). ASEX – TS of patients using TA (haloperidol, chlorpromazine, zuclopenthixol), atypical antipsychotics (AA) (quetiapine, risperidone, clozapine and olazapine) and TA+AA were 17.9±6.2, 16.9±5.6 and 17.6±5.6, respectively. The ASEX-TS of males using TA (16.6±5.7), AA (16.6±5.7) and TA+AA (17.5±4.7) antipsychotics were different ($p = 0.042$). The ASEX-TS of patients using risperidone (17.7±5.6) tend to be higher than other AA users. This tendency was most prominent when compared risperidone to quetiapine ($p = 0.022$). The TS of males using risperidone was significantly higher than quetiapine and olanzapine groups ($p = 0.001$, $p = 0.015$, respectively). With regression analysis, (independent variable: ASEX-TS and dependent variables: disease duration, CGI score, age, cigarette number, education level, TA/AA drugs, hospitalization numbers and gender), only gender ($B = -3.017$; $p < 0.001$) and CGI scores ($B = 0.102$; $p = 0.004$) were observed to have effects on ASEX-TS. According to UKU side effect scale, weight gain was observed more pronounced in TA antipsychotic group than in AA and TA+AA groups ($p < 0.001$).

Conclusion: Having a high percentage of patients (72%) not questioned about their sexual functions, indicates that psychiatrists underestimate the sexual dysfunctions in schizophrenic patients. There is no difference between the patients ASEX-TS using TA or AA drugs. In males, combination of TA+AA drugs deteriorates the ASEX-TS. Risperidone seems to have more negative effects on sexual functions compared to other AAs. In conclusion, sexual functions of schizophrenic patients should be questioned during patient visits. In addition, while selecting medications for long term therapies of schizophrenic patients, the effects of medications on sexual life should be considered, in order to increase the compliance and the quality of life of patients.

P.8.078 Neuroprotective effects of vitamin C on injured hippocampal neurones by impulse noise: experimental study

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Purpose: Intense impulse noise can damage the neurons of the hippocampus, cerebral cortex and hypothalamus. These pathologic entities may be responsible for serious behavioral and mental disorders in exposed to impulse noise survivors. Also, believed that vitamin C has a neuroprotective effects via its' antioxidant properties. The aim of this study was to evaluate neuroprotective effects of vitamin C on injured hippocampal neurons.

Methods: Fourteen hybrit rabbits were exposed to 90 dB impulse voice (which listening at various social activities) at doses of 5×60 min/day in an equal time intervals for two months. Only half of these animals supplemenred with vitamin C and the others feeded with standart foods. After two months, all animals were sacrified under general anesthesia and their brains were fixed with % 10 formaline solution. Later, 5 μm hippocampal sections were taken and stained with H&E. Physical dissector method was used to evaluate the numbers of living and degenerated neurons in each hippocampus. Numerical density of neurons and nuclear height were measured. The results were analysed by statistically.

Results: The numerical density of neurons and nuclear height in the hippocampus in vitamin C group was 15.9 mm3 and 4.8 nm. In contrast, in the non-treated group had a neuronal numerical density of 12.50 mm3 and a nuclear height of 3.0 nm. There was a significant difference in both the mean density of neurons and the mean height of nuclei between vitamin C-treated and control groups ($p < 0.05$).

Conclusion: Exposure to intense impulse noise may cause hippocampal injury and vitamin C treatment has important neuroprotective effects on the injured neurons resulted from impulse noise.

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P.8.080 Disturbed leptin, insulin and glucose interactions in eating disorders

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Objective: Anorexia nervosa (AN) and bulimia nervosa (BN) are syndromes of unknown etiology. They are associated with multiple sociological, psychological and biological factors. In the multimodal etiological approach of eating disorders the different endocrine abnormalities have important roles. Among others in the focus of interest are leptin and insulin and their effect on food intake and energy homeostasis. By binding to specific receptors in the hypothalamus leptin plays role in the body weight homeostasis, but it is involved in quite diverse physiological functions, such as reproduction. The aim of our study was to investigate the interaction between leptin, insulin and glucose metabolism by measuring the changes of plasma leptin, insulin and C-peptide concentration during glucose tolerance test and their correlation with BMI.

Methods: 83 patients were assessed, 30 with AN restricting subtype (AN-R), 11 with AN purging subtype (AN-P), 20 with BN, and 22 matched healthy controls (C). For measuring leptin and insulin RIA Linco Kits, for C-peptide IRMA Kit were used. Glucose was determined by spectrofluorometry.

Results: The leptin concentrations were low in patients with AN, both subtype, and moderately elevated in patients with BN, compared to normal controls. Surprisingly the expected elevation of insulin and C-peptide levels during glucose tolerance test was missing in all patients with eating disorder. In AN patients the terminal data of glucose tolerance test were lower than at the starting point.

Conclusions: None of the endocrine abnormalities have proved to be primary, hower they might participate in a vicious circle. Plasma glucose and insulin levels are known to modulate leptin secretion in healthy individuals. Our findings indicate disturbed glucose, insulin and leptin interactions. The observed changes in leptin and glucose metabolism did not always correlate with BMI, particularly the low concentration in AN-P is not supporting an exclusive role of BMI in determining serum leptin concentration.

P.8.081 Prophylactic combination trials in bipolar disorder: the role of oxcarbazepine

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Introduction: Although bipolar disorder is a highly recurrent condition, truly prophylactic trials are scarce. Even rarer are combination prophylactic trials, despite evidence that most patients are treated with combinations of several drugs.

Methods: We reviewed all the published trials in Medline and current contents enrolling patients with bipolar disorder. Strict combination prophylactic trials were defined as those with at least two parallel groups with random assignment of at least two different combination strategies in patients who were not in an acute episode at the time of inclusión, and which defined as primary outcome a measure related to long-term outcome.

Results: After extensive revisión of the methodology, no trial met the criteria to be considered a true combination prophylactic trial. Most long-term controlled trials used either cross-over designs or enriched designs assessing relapse prevention rather than prophylaxis. As a result of this research, we designed a true prophylaxis trial which would be able to address the ability to reduce the burden of episodes in patients with a high number of recurrences. This trial assessed the prophylactic efficacy of the combination of lithium plus oxcarbazepine versus lithium plus placebo, and has already enrolled N patients.

Conclusions: There are no pure combination prophylactic trials for bipolar disorder, despite some drugs having the potential to reduce the burden of recurrence in such a cyclic condition. Some drugs, such as oxcarbazepine, might be ideal to test the prophylactic efficacy of their combination with lithium.

P.8.082 The impact of different coercive measures setting on pharmacotherapy use in a psychiatric intensive care unit

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Purpose: In patients with psychiatric disorders, admitted to a Psychiatric Intensive Care Unit (PICU), two types of pharmacological treatment are in use. Patients are given regular pharmacotherapy according to the diagnosis and “pro re nata” or “as required” therapy to control disturbed behavior. In patients presenting with agitation, violence or self-harm apart from “as required” therapy which is also called “chemical restraint” (antipsychotics and benzodiazepines), different physical coercive measures are in use (net-beds, bed-belts, non-coercive types of supervision). The aim of our prospective naturalistic study was to assess the possible differences in pharmacotherapy following the reduction of physical safety measures, e.g. the abandonment of net-beds and the use of bed-belts only.

Methods: all patients admitted in two time interval – February–March in 1998 (when net-beds were still in use) and in 1999 (when only bed-belts were used) to PICU of University Psychiatric Hospital in Ljubljana, Slovenia, were evaluated. The collected data were: socio-demographic characteristics, ICD-10 diagnosis, Clinical Global Impressions, Global Assessment Scale and coercive measures. All prescribed medication, on regular basis or as chemical restraint, was thoroughly collected and doses calculated in chlorpromazine equivalents (in mg) for antipsychotics and benzodiazepine equivalents for benzodiazepines.

Results: 332 patients (173 men) in 1998 and 312 (168 men) in 1999 were admitted to PICU, with mean CGI 4.6 and GAS 35.6 in 1998, and mean CGI 4.9 and GAS 29.0 in 1999. Around 60% of all admissions were patients with psychosis, and 30% with organic disorders or substance abuse in both years. 95 patients had a sort of coercive measure, among them 24 were restraint in a net-bed in 1998. In 1999, 44 patients had a safety measure (16 were restraint with bed-belts). 66.8% of patients received antipsychotics in average dose 696.3 mg (SD = 736.2) on regular basis in 1998 vs 64.7% (average dose 569.1 mg; SD = 622.1) in 1999. Among the 95 patients in which safety measures were used in 1998, the average dose of antypsychotics used on as required basis was 78.0 mg (SD = 70.2) vs 149.2 mg (SD = 127.8) in 44 coerced patients in 1999 ($p = 0.05$). The doses of benzodiazepines were higher in 1999 as well. Although the difference in prescribed doses of antipsychotics is small, a tendency toward the use of higher doses of antipsychotics and BZD has been observed after the change in physical coercive measures setting.

Conclusion: A difference in psychopharmacotherapy use has been observed after the change in the coercive measures setting in PICU. We speculate that the reduced availability of coercive measures might affect the use of complementary chemical restraint. However other factors may be of importance, like the change in the attitude of staff towards patients’ disturbed behavior.