

with acetylcholine synthesis by various Abeta fragments. A more detailed analysis of the process has not been performed yet. Our experiments on hippocampal synaptosomes isolated from young adult male Wistar rats with (3H)hemicholinium-3, a selective and competitive inhibitor of the uptake, suggest a slight binding of Abeta 1–40 probably through tetrapeptide 25–28 to the recognition site of choline carriers. Phosphorylation increases the sensitivity of carriers to Abeta actions. The changes are predominantly connected with alterations in the activity of choline carriers. However, a small drop in their number probably via Abeta effects on G proteins and different phospholipases has been also found. The experiments with two plant cysteine proteases bromelain and papain, perspective supportive anti-inflammatory agents in Alzheimer disease therapy, indicate that Abeta-modified carrier protein is more sensitive to the proteolytic degradation *in vitro*. Moreover, the experiments with both proteases support an importance of the recognition site for mediating Abeta actions. This study firstly demonstrates the direct binding of nonaggregated Abeta 1–40 to choline carriers analogically to some membrane-bound receptors.

The research was performed under GACR grant (305/99/1317).

#### P01.146

##### INTRATER RATER RELIABILITY OF THE CLINICAL GLOBAL IMPRESSIONS (CGI) SCALE IN SCHIZOPHRENIA AND DEPRESSION: RESULTS FROM A CHART REVIEW RELIABILITY STUDY

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**Background:** The Clinical Global Impressions (CGI) scale has been extensively used in psychiatric research since introduction in the 1970s as a global measure of illness severity (CGI-1) or treatment-related change (CGI-2). Surprisingly, no data on the interrater reliability of the CGI in patients with depressive or schizophrenic disorders could be found in the literature so far.

**Methods:** Case records of 16 patients with schizophrenic disorder and 14 patients with a depressive disorder (DSM-IV) were retrospectively analyzed independently by 3 raters (2 psychiatrists, 1 study nurse) using CGI-1 and CGI-2 (7-point scales). All available information from the case records was used to estimate illness severity at admission (CGI-1A) and discharge (CGI-1D); the global severity change was directly assessed by the CGI-2 item. Intraclass correlation coefficients (ICC) were calculated.

**Results:** 14 (47%) of 30 patients (age  $41 \pm 14$  years) were female. CGI scores showed high variability between the patients (CGI-1, range 1–7; CGI-2, range 1–5). The analyses revealed moderate ICC values of 0.59, 0.51, and 0.52 for CGI-1A, CGI-1D, and CGI-2, respectively. Comparable results emerged for schizophrenic and depressive patients.

**Conclusions:** The results suggest a more cautious interpretation of CGI scores. The limited interrater reliability could be due to the single-item measures and to the lack of clearly defined item descriptors. Generally, the design of the present reliability study seems appropriate. However, the retrospective procedure is not perfectly corresponding to clinical every-day practice. Further studies with larger samples are required.

#### P01.147

##### ANALYSIS OF SUICIDES COMMITTED IN PODGORICA DURING 1995–1999 PERIOD

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This paper analyzes suicides committed in Podgorica during the 1995–1999 period divided according to gender, age and the way these have been performed. In 1995 we have 28 suicides on 100000 habitants, and in next five years there is a fall in trend thus in 1999, there are 17.3 suicides on 100000. Comparing to 1989 when suicide rate was 7.89/100000, and 1991 rate which was 7.24/100000, we can notice that big social stresses (economic crisis, war in surrounding states) lead to a rise in rate of suicides so average rate for period of 1995–1999 is 24.02/100000 which puts Podgorica into area with high suicide rate. The ratio of men and women who committed suicide is 1.43:1. In Podgorica, in 1996 that ratio was 1:1.66 which tells us that women in Podgorica killed themselves much more than other women. The largest number of people who killed themselves are between 35 and 44 years old and that number is almost the same as for people who are older than 65. The way that people use to perform suicide is mostly by firearm 44.61% and hanging themselves 21.53% which is near to average numbers in the world. This research shows that there is significant rise in suicide rate, that women are more endangered from risk factors than men. As a conclusion, on the basis of cited literature, the authors lined up all moments which can explain why women are in high risk group in Montenegro and why they are prone to suicide.

#### P01.148

##### HYPOVITAMINOSIS E IN MAJOR DEPRESSION

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**Objective:** Immune function is altered in patients with major depression, and it is improved by ingestion of vitamin E. This study was designed to determine if vitamin E levels are changed in unmedicated depressive patients.

**Methods:** We studied 19 women suffering from their first depressive episode (DSM IV), and the same number of age, sex, and body mass index-matched healthy controls. Patients were assessed with SCAN interview and Hamilton scale. Vitamin E serum levels were determined by HPLC (Bio-Rad Laboratories). In addition, cortisol was measured by RIA (Coat-A-Count Cortisol DPC kit), and Interleukin-6 was assessed by an ELISA (BioSource International).

**Results:** Vitamin E serum levels were lower in depressive patients (mean: 597; s.d.: 242 ug/dl) than in healthy controls (996; 288) (t-test;  $p = 0.000$ ). Clinical severity, weight loss, and other clinical variables did not exert any effect over vitamin E levels. Cortisolemia was higher in patients (mean: 18.3; s.d.: 6.5 ug/dl) than in controls (mean: 13.2; s.d.: 4.8), but cortisol and interleukin-6 levels did not correlate with vitamin E levels.

**Conclusions:** Vitamin E levels are lowered in depression. Over-activity on the hypothalamic pituitary adrenal axis and interleukin activity does not seem to be responsible for this finding.