

patients with recurrent mood disorders, suggesting a etiopathogenic link. We were trying to evaluate both the efficacy of amantadine, a substance of known, but not unchallenged, antiviral properties towards BDV and possible psychopathological clusters that could eventually lead to a better knowledge of prognostic factors in amantadine treatment. Our studies gave reason to believe that there is an antidepressive effect of amantadine related to antiviral but not predominantly other pharmacodynamic properties of the substance. Here, psychopathological patterns and illness courses are used to characterize subtypes of affective disorders, that differ in their response to treatment and in virological findings, respectively. These results can be applied to generate hypotheses regarding the underlying pathophysiologic neurotransmitter changes in patients with affective disorders. Also, concepts as "endogeneity" and "reactivity" can be discussed. Further research, especially international epidemiological studies as well as large-scale treatment studies taking into account the described differentiation are needed to fully understand these phenomena.

### FC05.03

#### FAMILIAL RELATIONSHIP BETWEEN BIPOLAR I DISORDER AND ATTENTION-DEFICIT/HYPERACTIVITY DISORDER

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**Background:** Although several studies found mania to be associated with attention-deficit/hyperactivity disorder (ADHD), the nature of this association remains unclear. The aim of the present paper was to study the mechanism of the association between bipolar I disorder and ADHD by assessing the cross-aggregation of the two disorders.

**Methods:** The familial patterns of bipolar disorder and ADHD were examined using data from an epidemiological family study with 100 treated bipolar I probands as well as 80 psychiatric (alcohol and heroine dependence) and 60 non-psychiatric comparison probands. Diagnostic assignment of the probands and more than 400 of their adult first-degree relatives was based on a best estimate procedure including semi-structured interviews, medical records and family history information. Data were analyzed using proportional hazard models.

**Results:** 1) A lifetime history of ADHD was highly associated with bipolar I and to a lower extent with substance use disorders in both probands and relatives; 2) a strong degree of familial aggregation was observed for bipolar I disorder but not for ADHD; 3) there was no evidence of cross-aggregation between bipolar I disorder and ADHD.

**Conclusion:** The high association between ADHD and bipolar I disorder as well as substance use disorders and the finding of a lack of familial aggregation of ADHD suggest that this condition is rather an unspecific precursor of psychiatric psychopathology than an independent disorder.

### FC05.04

#### INFLUENCE OF PHARMACOLOGICALLY DIFFERENT ANTIDEPRESSANTS ON NEUROCOGNITION OF PATIENTS WITH DEPRESSIVE DISORDERS

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**Introduction:** Neuropsychological deficits may be part of the symptomatology of depression, but can be side effect of psy-

chotropic medication as well. Which is most of all supposed for drugs with anticholinergic property.

**Material und Method:** Three different groups of patients were examined by means of standardized, computerized performance tests (the visual attentiveness test VAT, the word recognition test WWT, and the continuous attentiveness test DAUF). The groups were matched with respect to age, gender, duration of illness and frequency of depressive episodes. Each group had a different AD-medication. Group I had TCA's, group II SSRI's and group III novel, atypical agents such as mirtazapine, venlafaxine and nefazodone. The clinical status was determined by use of the HAMD. The dosages of AD's were categorized by means of an expert rating procedure. For statistical analysis, the Mann-Whitney U-Test was performed.

**Results:** HAMD-Scores were higher in group III than in group I ( $p < 0.03$ ) and group II ( $p < 0.04$ ). The dosage of the AD's showed no difference. As to the cognitive performance, Group III came off worse in the variation of the reaction-time (DAUF) than group I ( $p < 0.05$ ), and in part I ( $p < 0.01$ ) and part III ( $p < 0.03$ ) of the WWT than the patients of group II. No differences at all were found between group I and group II.

**Conclusion:** According to the cognitive performance tests group III came off slightly worse than the two other groups. Since group III contained some patients with severe depression this fact was to be expected. The conclusion is, that no differential effects of the different AD's, especially the TCA's, on the cognitive performance of our patients were found.

### FC05.05

#### A GENOME-WIDE SCAN IN 10 MULTIPLEX FAMILIES WITH BIPOLAR DISORDER

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We present data of a genome-wide scan (391 markers) in 10 large Belgian families with bipolar disorder. For linkage studies, patients with bipolar disorder I or II, and with recurrent major depressions were considered to be affected, other psychiatric diagnoses were coded as "unknown". 54 persons were affected, 55 unaffected and 27 unknown. Linkage simulation studies showed an average LOD score of 7.75 with a linked marker for the total sample under the assumption of homogeneity. Linkage analysis was performed using GENEHUNTER. The maximal parametric LOD score found in twopoint analysis was 0.89 with marker D10S581. The flanking marker (D10S537) also yielded positive LOD scores. With these 2 markers, twopoint NPL-Z scores of respectively 2.84 and 2.93 were found. Multipoint analysis showed a maximal parametric LOD score of 0.65 and an NPL-Z score of 4.82 in the same region of chromosome 10, the highest scores found over the genome. The candidate region spans around 30 cM in the centromeric part of 10 q, and is not overlapping with the published candidate region close to the telomere. Other positive LOD scores were obtained with markers on chromosome 7 (NPL-Z = 2.73 in twopoint analysis) and chromosome 12 (NPL-Z = 2.24 in multipoint analysis).