

P01-92 - EARLY CHANGES ARE ASSOCIATED WITH LATE CHANGES OF BDNF SERUM LEVELS IN INPATIENTS WITH MAJOR DEPRESSION DURING SHORT-TERM ANTIDEPRESSANT TREATMENT

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Objectives: Mean BDNF serum concentration is lower in patients with major depression (MD) as compared to healthy controls. BDNF increases during the course of antidepressant treatment. This increase has been associated with symptom amelioration. The aim of this study was to analyse the relation between early and late BDNF changes during antidepressant treatment.

Methods: Forty-six patients with MD according to DSM-IV were included for this study. Patients were treated as clinically indicated. Depression severity was assessed by HAMD-17 by trained raters from baseline to week 6 in weekly intervals. Serum at each visit (baseline, V1-V6) was obtained from whole blood after centrifugation with 1.000 x g for 15 minutes. Aliquots were frozen at -80°C until analysis. BDNF serum concentration was determined with ELISA (R&D Systems). We analysed correlations between early changes of BDNF level (baseline to weeks 1 and 2) with BDNF changes in the later course of treatment (change from baseline to weeks 4, 5 and 6). Further, the association between early and late BDNF changes was calculated by means of linear regression analysis.

Results: There was a high correlation between BDNF changes in the early course of treatment and final BDNF changes ($p < 0.05$ for each analysis). Early BDNF changes accounted for a high percentage of the variance of late BDNF changes ($p < 0.05$ for each analysis).

Conclusions: These results suggest that an early change of BDNF serum level is predictive for BDNF change in the later course of antidepressant treatment in patients with Major Depression.