P-179 - BRAIN-DERIVED NEUROTROPHIC FACTOR AS A BIOMARKER OF CLINICAL RESPONSE IN BIPOLAR DISORDER: 16 WEEK FOLLOW-UP STUDY

I.Grande[1,2], I.Chendo[2,3], B.N.Frey[4], K.M.Cereser[2], L.Stertz[2], G.Colpo[2], G.R.Fries[2], A.B.da Cunha[5], E.Vieta[1], F.Kapczinski[2]

[1]Bipolar Disorders Program, Clinical Institute of Neuroscience, Hospital Clínic, University of Barcelona, IDIBAPS, CIBERSAM, Barcelona, Spain, [2]Bipolar Disorder Program and Laboratory of Molecular Psychiatry, National Institute for Translational Medicine, INCT-TM Hospital de Clínicas de Porto Alegre, Federal University of Rio Grande do Sul, Porto Alegre, Brazil, [3] Hospital de Santa Maria, Lisbon, Portugal, [4]Department of Psychiatry and Behavioural Neurosciences, McMaster University, Hamilton, ON, Canada, [5]Department of Neuropsychiatry, Centro de Ciências da Saúde, Universidade Federal de Santa Maria, Santa Maria, Brazil

Introduction: Despite therapeutic advances, we still have difficulties in predicting response to treatment in bipolar disorder (BD). Brain-Derived Neurotrophic Factor (BDNF) has been put forward as a potential peripheral marker of treatment response.
Objective: To prospectively study the relation between clinical response to treatment and serum BDNF levels.
Aims: To investigate a) a possible association between serum BDNF levels and clinical response along 16 week follow-up and b) the role of val66met polymorphism in clinical response in a sample of drug-free patients with BD going through a mood episode.
Methods: This is a naturalistic, open-label prospective nested case control study matched for age, gender and ethnicity. Patients were 18 years or older, required BD diagnosis, undergoing a current manic, mixed or depressive episode and be off-medication for at least 2 weeks. Clinical assessment and blood withdrawn were conducted along follow-up. At the end of the study, patients were classified according to clinical response.
Results: 25 of 36 (69.4%) of the patients were female and the mean age was 37.8 (SD 11.8) years old. Baseline serum BDNF levels did not show any difference between patients and controls (p=0.075).There was a significant negative correlation between differences in serum BDNF levels and in CGI score along follow-up (r=-.372, p=0.028). Serum BDNF levels were significant higher in responders compared to non-responders at week 4, 8 and 16 (p=0.026, p=0.009, p=0.001 respectively). Val66met polymorphism did not seem to interfere in clinical response.
Conclusions: Changes in serum BDNF levels may help in monitoring treatment response.

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