P-362 - BRAIN DERIVED NEUROTROPHIC FACTOR, COGNITION AND FUNCTIONING OF PATIENTS WITH FIRST PSYCHOTIC EPISODE

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Introduction: Brain-derived neurotrophic factor (BDNF) promotes growth and maintenance of connections and participates in plasticity mechanisms.The cognition an the functioning of patients with a first episode of psychotic (FEP) is altered.
Objectives: We analyze the relation between the BDNF, the cognitive performance and prognosis in patients with FEP.
Design and Methods: 45 patients with a FEP from the Basque Country, diagnosed using the SCID-I and DSM-IV. Plasma BDNF levels were measured using the BDNF Sandwich ELISA Kit. All patients were assessed clinically three times over a year using PANSS, GAF and Strauss Carpenter scales. Battery of cognitive tests (Wechsler Memory Scale and WAIS-III) was applied six months after the acute episode.
Results: Positive correlation between BDNF levels after six months of treatment and five cognitive domains: abstract verbal reasoning (r=0.468), motor and processing speed (r=0.397), learning capacity (r=0.559), immediate memory (r=0.409) and delayed memory (r=0.382). Also, the patients with lower BDNF plasma levels at baseline, at 6 months follow-up had worse social activity (0.61 vs. 0.89; p=0.041) and functioning (0.69 vs. 0.93; p=0.044).The BDNF levels increased along the follow up, after the pharmacological treatment (basal-1 month: Z= -2.88; p≤0.004 and 1-6 months: Z= -2.23; p≤0.05).
Conclusions: Our results suggest that BDNF is associated with cognitive impairment seen after a FEP and their prognosis. After the pharmacological treatment, the BDNF levels increase significantly and at 6 moths of treatment there were normal levels. Further investigations of the role of this neurotrophin in the symptoms associated with onset of psychosis are warranted.

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