

## Study of Insight in Patients with Obsessive Compulsive Disorder and Its Relation to Executive Functions and Serum Brain Derived Neurotrophic Factor

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### Abstract:

**Background:** Obsessive-compulsive disorder (OCD) is a distressing mental disorder which is usually associated with insight's heterogeneity, and those with poor insight showed extreme symptom severity, lower brain derived neurotrophic factor (BDNF) and cognitive deficiencies. The main aim of the work is to detect the relation between OCD and its insight to executive dysfunction and BDNF.

**Materials and methods:** Forty patients diagnosed with OCD with exclusion of another psychiatric comorbidities and substance use disorders and forty matched healthy controls. Also, both poor and good insight groups (assessed by The Brown Assessment of Belief Scale) were compared as regard Trail making Test and serum level of BDNF).

**Results:** OCD Patients group gave a significant worse performance in TMT and lower BDNF serum level than healthy control. Also, OCD patients with poor insight had lower BDNF level than patients with good to fair insight. ROC curve analysis confirmed that BDNF is a valuable diagnostic biomarker of insight in patients with OCD with 100% sensitivity and 72.41% specificity, p-value < 0.001. Insight of OCD patients was not significantly associated with executive dysfunction detected by Trail Making Test

**Conclusions:** OCD patients with poor insight had longer duration of illness, severe OCD symptoms, lower serum BDNF level, longer time on TMT A-B than good insight patients. BDNF is a valuable diagnostic biomarker of insight in patients with OCD.