

BRAIN-DERIVED NEUROTROPHIC FACTOR AND B-CELL LYMPHOMA LEUKEMIA-2 PLASMA LEVELS IN PATIENTS WITH SUBSYNDROMAL SYMPTOMATIC DEPRESSION

Z. Li^{1,2}, Y. Fang²

¹Department of Neurology, Shanghai Changhai Hospital, Secondary Military Medical University, ²Division of Mood Disorders, Shanghai Mental Health Center, Shanghai Jiao Tong University School of Medicine, Shanghai, China

Objective: To explore the relationship between brain-derived neurotrophic factor (BDNF) and B-cell lymphoma Leukemia-2 (Bcl-2) plasma levels in subsyndromal symptomatic depression (SSD) patients.

Methods: In this case-control study, Enzyme-Linked Immunosorbent Assay (ELISA) method was used to analysed the differences of BDNF plasma levels between SSD group (n=42) and healthy controls (n=51). At the same time Hamilton Depression Rating Scale-17(HAMD17) were assessed the patients'severity.

Result: There were significant difference of BDNF plasma levels between SSD group (medium 2.97 ng/ml)and healthy group (medium 3.71ng/ml, $z=-2.94$, $P=0.003$). Furthermore, BDNF plasma levels in SSD patients were associated with Hamilton score ($r=-0.53$, $P<0.001$). Plasma Bcl-2 levels were not different between SSD group (medium 4951 U/ml) and health controls (medium 5574 U/ml) ($z=-1.71$, $P=0.09$); and plasma Bcl-2 levels in SSD group were not associated with Hamilton score ($r=-0.10$, $P=0.34$).

Conclusion: The study suggested that the decreased BDNF plasma levels were related with the pathophysiology of SSD and it might reflect the severity of disorder.