

## **ASSOCIATION BETWEEN INFLAMMATORY CHANGES IN BLOOD AND POST-STROKE DEPRESSION**

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Depression is appeared to be the most frequent psychiatric disorder in patients which survived ischemic stroke. Experimental data suggest that immune mechanisms may contribute to developments of depressive disorders.

The aim of study was to investigate the concentration of interleukin-6 (IL-6), C-reactive protein (CRP) in patients which survived mild/moderate primary ischemic stroke with and without major depressive disorder at the third month after stroke onset.

Methods: Total number of 80 patients after primary cerebral ischemic stroke was included in the study. Hamilton depression rating scale (HDRS) and criteria DSM-IV were used for the diagnosis of post-stroke depression. Concentrations of CRP and IL-6 in blood serum were assessed by the enzyme-linked immunosorbent assay (ELISA). All the patients were divided in two groups according to the presence or absence of PD.

Results: The prevalence of depression in observed patients was 31.2%. Patients with PD had significantly higher serum levels of IL-6 and CRP ( $P = 0.03$ ,  $P = 0.02$  respectively). A positive correlation was revealed between serum IL-6 concentrations and total score according to the HDRS ( $r = 0.68$ ).

Conclusion: Patients with increased concentrations of IL-6 and CRP at the third month after primary ischemic stroke have reliably higher incidence of post-stroke depression development while compared those with no pro-inflammatory changes.