Simvastatin inhibits the increase in serum tau protein levels in the acute phase of ischemic stroke

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Abstract:
Our goal was to analyze the effects of treatment with a 3-hydroxy-3-methylglutaryl coenzyme A (HMG-CoA) reductase inhibitor (simvastatin, 40 mg/day) on serum S100BB and tau protein levels during the acute ischemic stroke (IS). Twenty four patients with IS were divided into two equal groups; treated and untreated with simvastatin. Blood was obtained four times during acute IS. Tau protein was noticed in six patients from treated group and in five patients from untreated group. The serum tau protein levels significantly increased on the 10th day only in patients untreated with simvastatin (p < 0.05). Simvastatin did not exert an effect on serum S100BB protein levels.

Key words:
stroke, simvastatin, tau protein, S100BB protein