

DYNAMIC EVOLUTION OF OXIDATIVE STRESS MARKERS IN PATIENTS WITH ISCHEMIC STROKE

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There is strong evidence that oxidative stress appears to be a major contributor to ischemic brain injury. Despite numerous defenses, the brain is vulnerable to oxidative stress. Enhanced antioxidant capacity after acute stroke therefore may protect against the adverse effects of free radical production during ischemia and reperfusion.

Objective: To study dynamic evolution of markers of oxidative stress after ischemic stroke and to find if there is any special correlation between them or with the clinical status.

Methods: prospective study; we measured markers of oxidative stress – Total Antioxidant Status (TAS), uric acid, albumin, LDL – , CRP in 27 patients at the onset and 2 months after stroke, and try to find if there is any correlation in variation of these markers with clinical status evaluated by NIHSS scale.

Results and conclusions: Mean values of TAS, albumin and uric acid were lower 2 months after the stroke than at the onset. We found a correlation between uric acid, CRP and TAS stronger initial than after 2 months after stroke; values of LDL and albumin didn't correlate with TAS at both determinations. There was no correlation between NIHSS and TAS, too.

In this case we presume that the monitoring the TAS will be very important in the therapy establish after ischemic stroke. We point out at this moment that the adjuvant therapy with an antioxidant will be benefic for the subject with ischemic stroke.