IMMUNOENZYMATIC ASSESSMENT OF ANTIFOSPHOLIPIDIC ANTIBODIES IN ISCHEMIC STROKE IN

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Introduction. Early recognition of stroke in children involves rapid neurological consultation, hospitalization in stroke departments, to provide a management of diagnosis (brain imaging) and coherent etiological and pathogenetic treatment, to improve results. Research into the importance of immune markers in stroke has become current.

The aim. Purpose. Assessment of antiphospholipid antibodies (APA) in ischemic stroke (IS) in children to determine their role in early diagnosis and predictive factors of the disease.

Materials and methods. In 2017–2020, a prospective study was performed in the Republic of Moldova on 53 children with IS (study group — L.S.), in which, during the acute period of the disease, the serum levels (by ELIZA method) of APA were assessed. At the same time, this marker was appreciated in 53 children from the control group (L.C.).

Results. A mean level of 1.37 ± 0.046 U/ml in L.S. compared to the mean level of 0.92 ± 0.021 U/ml in L.C. In L.S. there was an increase of approximately 2.6 — fold increase in maximum APA values in children with stroke compared to LC, 1.7 — fold increase in mean and 1.6 — fold increase in minimum (F = 60,701, p < 0.001), which was suggestive of the presence of inflammation in children with acute stroke, but also of a state of hypercoagulability, attesting to the initiation of proactive thrombotic mechanisms for coagulation cascades and the promotion of cerebral ischemia

Conclusions. A statistically significant difference can be observed between the groups included in the study, by increasing the APA level in children with IS. Thus, APA can be considered an important marker in the onset and severity of the cerebral ischemic process.