

ORIGINAL RESEARCHES

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Ischemic stroke in children depending on risk factors

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Abstract

Background: Ischemic stroke (IS) in children is a major neuropediatric emergency. The incidence of stroke in children is from 2 to 13 for 100000 children. IS in perinatal period occurs in 1 for 2300 – 5000 live births.

Material and methods: In 2010 – 2019 in the Republic of Moldova was carried out a retrospective as well as prospective study on a cohort of 458 children diagnosed with stroke. Were studied possible risk factors related to IS. Out of 458 children, 284 children with IS were selected and diagnosed during the reference period.

Results: IS was determined in 284 cases with the diagnosis of stroke (62%, 95CI 59.73-64.27). Among the most common risk factors for the development of neonatal IS are pathologies of amniotic membranes in 113 cases (39.8%, 95CI 36.9-42.7), pathologies of amniotic fluid with meconium in 135 cases (47.5%, 95CI 44.54-50.46), and history of urgent caesarean section in 132 cases (46.5%, 95CI 43.54-49.46). Among the etiological causes of IS in the studied children were: congenital heart anomalies in 52 cases (18.3%, 95CI 16.01-20.59), neonatal encephalopathy in 27 cases (9.5%, 95CI 7.76-11.24), genetic syndromes in 18 cases (6.3%, 95CI 4.85-7.75), sickle cell disease – 5 (1.8%, 95CI 1.06–2.54), MELAS syndrome – 4 (1.4%, 95CI 0.7-2.1).

Conclusions: IS risk factors are an important problem in clinical research. Most often, there is not a single risk factor responsible for the development of IS in children.

Key words: stroke, ischemic, children, risk factors.

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