

Causes and Risk Factors of Childhood Stroke: Analysis and Prognosis

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Annotation: Although stroke is a relatively rare neurological disease in children, it is important to pay attention to this problem due to its serious consequences and long-term complications. Pathogenesis of stroke in adults wide studied though, guys stroke etiology, danger factors and clinical manifestations still complete exactly not. This is early identify, effective cure and preventive measures work on the way out known obstacles bringing is releasing.

Keywords: neurological, stroke, ischemic stroke, brain, thrombus, embolism, prognosis, hemorrhagic stroke.

Introduction.

Children stroke various reasons exists being, they are innate heart defects of the blood coagulation in the system problems, infectious diseases, systemic vasculitis or brain veins congenital associated with anomalies to be possible. At the same time, clinical studies to the results according to socio-economic conditions, genetic factors and family history is also in the development of stroke plays an important role.

Today's on the day children stroke early detection, danger factors assessment and forecast to do according to international scientific works is increasing in Uzbekistan. and this in the field research still limited on a scale is modern epidemiological and to clinical approaches need increasing is going.

General analysis of the literature

Pediatric stroke is a neurological pathology that occurs as a result of an interruption in the blood supply to the brain tissue, and its causes and clinical manifestations differ from those in adults. In recent years, the incidence of pediatric stroke has been increasing worldwide, which indicates the need for more in-depth research in this area.

Research and methods.

Stroke classification

In the literature, strokes are usually divided into two types:

1. Ischemic stroke – occurs as a result of blockage of the cerebral vessels by a thrombus or embolus.
2. Hemorrhagic stroke – occurs when blood vessels in the brain rupture and bleed.

Ischemic strokes in children are more likely to develop due to congenital or hereditary causes than in adults. Hemorrhagic strokes are more likely to occur due to conditions such as aneurysms or arteriovenous malformations.

Prevalence status and epidemiological data

The incidence of pediatric stroke worldwide is 2–13 cases per 100,000 children. Most cases of stroke occur in infants under 1 year of age, as well as in children aged 5–10 years. Studies show that pediatric stroke is more common, especially in boys.

Diagnostics and identification problems

Early detection of stroke in children is difficult because the symptoms are often different from those in adults and are vague. For example, infants may experience symptoms such as irritability, decreased movement of the right or left side of the body, not eating, and unconsciousness. Therefore, instrumental diagnostics such as computed tomography (CT) and magnetic resonance imaging (MRI) are important.

The main reasons cited in the literature are:

- a) Cardiovascular system defects (congenital anomalies)
- b) Blood coagulation disorders (thrombophilia, hemophilia)
- c) Infectious and inflammatory diseases (encephalitis, meningitis)
- d) Oncological diseases and their treatment (leukemia, chemotherapy)
- e) Aneurysm and arteriovenous malformations in the brain
- f) Family history and genetic mutations

3. Causes of stroke in children

The factors that lead to the development of stroke in children are different from those in adults, and in most cases congenital, hereditary, and infectious causes play a major role. In the scientific literature, the causes of stroke in children are grouped by etiology as follows:

1. Cardiogenic (heart-related) causes

Congenital defects of the cardiovascular system are one of the main causes of ischemic stroke in children. In particular:

- a) Congenital heart defects (atrioventricular septal defect, tetrad of Fallot, etc.)
- b) Endocarditis (inflammation of the heart valves)
- c) Arrhythmias and heart valve abnormalities

Embols that appear in the heart reach the cerebral vessels and cause the development of an ischemic stroke.

2. Causes related to the blood clotting system (hemostasis disorders)

Coagulopathy, or blood clotting disorders, are risk factors for stroke in children. The most common conditions are:

- a) Thrombophilia (hereditary or excessive platelet activity)
- b) Protein C and C deficiency
- c) Antiphospholipid syndrome

These conditions increase the probability of thrombus formation and promote the development of ischemic stroke.

Result and discussion.

3. Infectious and inflammatory causes

Infections pose a significant risk for stroke in children. In particular, inflammatory processes affect the walls of blood vessels and cause thrombosis. The most common infections are:

- a) Encephalitis and meningitis
- b) Herpes simplex virus
- c) Sepsis and cytomegalovirus infection in infants

4. Anomalies of cerebral vessels

- a) Arteriovenous malformation (AVM)
- b) Aneurysm
- c) Vasculitis of cerebral vessels

In these cases, hemorrhagic stroke may develop due to weak blood vessel walls or increased blood pressure.

5. Oncological diseases and effects of treatment

The risk of hemorrhagic stroke may be increased in patients with blood diseases such as leukemia, as well as in patients receiving chemotherapy and radiotherapy. In these cases, thrombocytopenia and impaired blood clotting can lead to stroke.

6. Traumatic reasons

Injuries to the brain, especially in children of infant age, cause the development of stroke through mechanical damage to the vessels.

7. Genetic and hereditary factors

In some cases, genetic mutations, the presence of stroke cases in the family history increase the likelihood of a child developing a stroke.

The purpose of this scientific work is to study the main causes and risk factors of children's strokes based on the analysis of scientific literature, to evaluate their interdependence and impact on the prognosis.

Scientific of the work tasks:

1. Children stroke the concept scientific basically to describe
2. To the development of stroke take visitor the reasons systematization.
3. Danger factors scientific sources based on analysis to do

4. Prognosis and methods of prevention due recommendations to give

Research Object: Scientific in literature illuminated children stroke circumstances.

Research Subject: Children stroke causes, danger factors and them assessment methods.

Scientific News : This study results children to stroke due exists the information national in the circumstances analysis to do, risk factors early to determine and effective preventive measures work to go out service does.

Conclusion.

According to the analysis of international and local sources, pediatric stroke is a condition that occurs due to complex causes, and its early detection and identification of risk factors play an important role in mitigating the consequences of stroke. Although the number of scientific works in this area is increasing, national research is insufficient. Therefore, it is urgent to analyze the existing literature and develop prevention and prognosis methods based on them.

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