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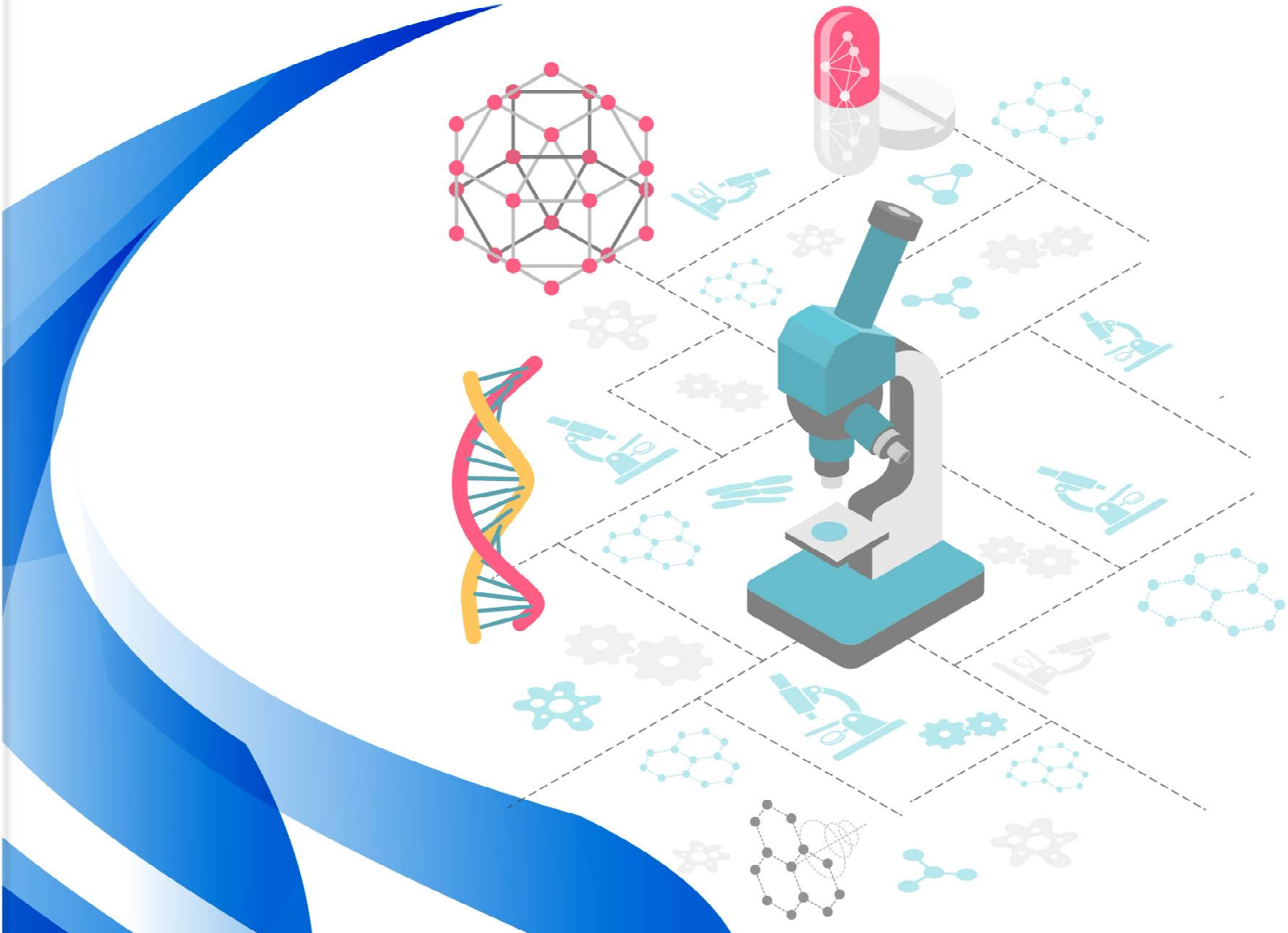

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FEATURES OF THE COURSE OF FEBRILE SEIZURES IN CHILDREN

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Resume: the article presents the results of a comparative study of children with febrile and afebrile seizures. It is established that febrile seizures develop in hyperthermia due to somatic disease and are accompanied by micro-organic diffuse symptoms that do not affect the cognitive development of the child.

Keywords: febrile convulsions, afebrile convulsions, children.

Febrile seizures (FS) traditionally attract the attention of pediatricians and pediatric neurologists, since this common condition can cause the development of epilepsy and the formation of persistent intellectual and neurological deficits.

Convulsive syndrome is one of the most urgent problems of pediatric neurology. The frequency of epilepsy in the population is 0.5-0.75% of the child population, and febrile seizures (FS) - up to 5%. About half of all seizures occur before the age of 15, of which the largest number of seizures occur between the ages of 1 and 9 years. The frequent development of seizures in childhood is explained both by the peculiarities of the child's nervous system and by the variety of causes that cause them[1-6].

Febrile seizures (English - febrileseizures) are paroxysms of various duration, occurring mainly in the form of tonic or tonic-clonic seizures in the extremities, occurring in infants, early and preschool children at a body temperature of at least 37.8-38.5 oC (with the exception of seizures induced by CNS infections), with a likely transformation later into afebrile seizures and epilepsy [3-5, 7]. The previous history of afebrile seizures in children does not allow us to consider episodes of seizures that occur against the background of hyperthermia as febrile [8-11].

Febrile seizures (AF), the most common paroxysmal conditions among children aged 6 months to 5-7 years, belong to a group of diseases that do not require a mandatory diagnosis of epilepsy. The term febrile convulsions was changed to febrile seizures in 2001, since not only convulsive but also non-convulsive paroxysms can be observed in the clinical picture of this condition[1-2].

The aim of our study is to study the clinical and neurological manifestations of febrile seizures in children.

The main group included 26 children with simple febrile seizures, the second group included 24 children with afebrile seizures that developed after an episode of fibrillar seizures. The control group consisted of 20 healthy children, comparable to the patients by gender and age. All children underwent targeted clinical and neurological, laboratory and instrumental examinations.

The diagnosis was established on the basis of the results of clinical and neurophysiological (EEG, computer and magnetic resonance imaging) studies.

The examined children had concomitant diseases in the form of pathology of the ENT organs: tonsillitis (25%), rhinosinusitis (19%), nasopharyngeal pathology-10.8%, pathology of the hepatobiliary system: biliary dyskinesia (59.2%), cholecystitis (18.3%), gastrointestinal tract: colitis (19.2%), anemia (32.5%), as a result of collecting anamnesis, the following diseases were identified: viral hepatitis A (11.7%), childhood infections (76.7%). The subjects had frequent acute respiratory infections (98.3%) and colds, the number of episodes during the cold period was 3 times or higher, which indicates a sufficient decrease in the immune status, these children belonged to the group of frequently ill children.

During the examination of the neurological status in febrile convulsions, diffuse small-focal symptoms were

determined, in the form of revival of tendon reflexes in 10 children (38%), autonomic dysfunction in the form of hyperhidrosis of the palms and feet and marbling of the skin in 8 children (31%), hemigipoplasia in 6 children (23%). Whereas in afebrile seizures, the signs of abnormalities were more pronounced: increased tendon reflexes in 23 children (96%), pathological reflexes in 8 children (23%), impaired coordination of movements in 5 children (21%), central paresis of 7 pairs in 18 children (75%), facial asymmetry in 15 children (63%), oculomotor disorders and strabismus in 11 children (46%)

One of the characteristic disorders for children with afebrile seizures is a lag in psychorechological development in 10 children (42%). Signs of somatoform disorder of the ANS were characteristic of children in the group with febrile seizures, while in the group with afebrile seizures were observed in 31 % of children.

For a group of children with febrile seizures, it was characteristic: the first onset of seizures was noted after 1 year, the cause of the development of seizures was hyperthermia, the attack was generalized clonic-tonic in nature, the duration of convulsive paroxysm was up to 5-10 minutes. After convulsions, focal symptoms, soporotic state, deafness, prolonged post-convulsive sleep, involuntary act of defecation and urination were not observed. Convulsions were observed in severe hyperthermia, the cause of which was a viral infection of the upper respiratory tract, exacerbation of chronic tonsillitis, intestinal infections.

It should be noted that there was no visible difference in the behavior of children after simple febrile seizures, moodiness and tearfulness were more associated with somatic disease, especially patients hospitalized in somatic departments. No organic signs were observed in children with febrile seizures. One of the manifestations was ANS dysfunction, which was manifested by hyperhidrosis of the palms and feet, marbling of the skin. According to Guzeva V. I., the pathogenesis of FS is based on dysfunction of thermoregulatory centers, due to defective structures of the limbic-reticular complex (sleep disorders and vegetative-visceral disorders).

In the group of children with afebrile seizures, atypical seizures were noted, usually focal, more often hemiclonic in 12 children (50%), 5 children (21%) had the character of absences, 7 children (29%) had secondary generalized convulsive paroxysms. Seizures were more pronounced at subfebrile temperature (63%). At the same time, the duration of more than 5 minutes was noted, the predominance of convulsions on one side, asymmetry in the movements of the right and left limbs, the act of urination was noted in 3 children, complete unconsciousness in 4 children and a soporotic state in 3 children.

It should be noted that most of these children were hospitalized in the intensive care unit, 2 children developed an epileptic status, 8 children had repeated seizures of the same nature during the day. After an attack of atypical febrile seizures, 11 children (46%) of this group, who debuted before the age of 1, developed afebrile seizures after 4 years, and were subsequently hospitalized in the neurological department with a diagnosis of symptomatic epilepsy. Parents later noted the addition of organic symptoms and the formation of intellectual deficits in these children. Later, in 50% of these children, the parents confirmed the hereditary burden in these children, although at the beginning of the disease they denied it.

Conclusion: febrile seizures develop in hyperthermia due to somatic disease and are accompanied by micro-organic diffuse symptoms that do not affect the cognitive development of the child.

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