

and pruritus were most common, and most patients reported no negative impact on daily life. Larger prospective studies are warranted to confirm these findings.

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BIOCHEMICAL VARIATIONS FOR NON-EPILEPTIC PAROXYSMAL CONDITIONS IN PEDIATRICS

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Relevance. The diagnostic approach to non-epileptic paroxysmal conditions requires the integration of clinical assessment, electrocardiographic assessment, and biochemical analysis. Biochemical parameters (electrolytes) may trigger arrhythmogenesis [1]. It is still unclear how electrolyte changes affect atrial electrophysiology [2]. To manage paediatric patients well, a grasp of electrolyte pathophysiology is needed [3].

Target. To analyze biochemical changes for non-epileptic paroxysmal conditions by children's age and sex.

Research methods. A cohort study of 73 children (age 1-17) with non-epileptic paroxysmal conditions at Grodno Children Hospital in 2024-2025. Inclusions: age ≤ 17 years showed paroxysmal suspected cardiac origin & available clinical records. Exclusions: confirmed epilepsy with structural heart disease, acute infections with secondary heart involvement & incomplete medical records. Statistical data was processed on a personal computer with the aid of the StatSoft Statistika 10.0 tool. The research involved scientific, theoretical and comparative analysis of medical literature

Results and their discussion. Biochemical analysis was performed in 71.2% of the total cohort. The normal biochemical results were documented in 44.2% of those tested. The distribution by sex was nearly equal (10 females, 13 males). Age group analysis revealed that normal profiles were observed across all developmental stages, with the highest frequencies in school-aged children (6 cases) and adolescents (7 cases). Hyperchloremia were detected in 48.1% of those tested. The distribution by sex was balanced. Age group analysis demonstrated that hyperchloremia affected all

developmental stages, with the highest incidence observed among infants (24%) and toddlers (20%). This pattern suggests that younger children may be particularly susceptible to chloride homeostasis disturbances, possibly related to immature renal regulatory mechanisms or increased vulnerability to dehydration. Hyperkalemia were identified in only 3.8% of those tested. Elevated creatinine kinase levels were observed in 3.8% of whole cases. Notably, both cases occurred in female infants, suggesting a possible age- and sex-specific pattern. Other biochemical parameters (sodium, calcium, magnesium, LDH, phosphorus, glucose) were within normal ranges for the majority of tested patients.

Conclusions. Children with non-epileptic paroxysmal disorders have a variety of metabolic patterns that differ by sex and age. Hyperchloremia emerges as the most prevalent abnormality, affecting nearly half of tested patients with particular frequency in infants and toddlers. This finding highlights the importance of routine electrolyte monitoring in pediatric patients presenting with paroxysmal symptoms and suggests that chloride homeostasis disturbances may contribute to the pathophysiology of these events, either directly or as markers of underlying metabolic stress.

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MECHANISMS OF DEVELOPMENT AND THERAPY METHODS OF ENDOCRINE OPHTHALMOPATHY

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Relevance. The relevance of studying endocrine ophthalmopathy (EO) is due to the high prevalence of this complication of autoimmune thyroid diseases, particularly diffuse toxic goiter (Graves' disease, GD), and the high risk of developing visual impairment leading to patient disability [1]. Understanding the pathogenesis of EO is crucial for developing methods for its prevention and treatment. Furthermore, the treatment of this difficult-to-treat complication of GD remains relevant.

Target. To study the mechanisms of development of endocrine ophthalmopathy and current treatment methods for this condition.