

**“BOLALARDA STREPTOKOKK INFEKSIYASINING YOSHGA QARAB
KLINIK NAMOYON BO‘LISHI”.**

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Toshkent davlat tibbiyot universiteti Termiz filiali 1-bosqich talabalari.

Annotatsiya. Ushbu maqolada bolalarda Streptokokk infeksiyasi ning yoshga qarab klinik namoyon bo‘lish xususiyatlari tahlil qilinadi. Streptokokk infeksiyasi bolalar orasida keng tarqalgan bo‘lib, uning kechishi bolaning yoshiga, immun tizimi holatiga va organizm reaktivligiga bog‘liq. Maqolada yangi tug‘ilgan chaqaloqlardan boshlab o‘smirlik davrigacha bo‘lgan bolalarda kasallikning asosiy klinik belgilaridagi farqlar yoritilgan. Shuningdek, Streptococcus pyogenes ning etiologik roli va uning asoratlari haqida ham ma‘lumot berilgan. Tadqiqot natijalari bolalarda streptokokk infeksiyasini erta aniqlash va samarali davolashda muhim ahamiyat kasb etadi.

Kalit so‘zlar: Streptokokk infeksiyasi, Streptococcus pyogenes, bolalar, yoshga xos xususiyatlar, klinik namoyon bo‘lish, immun tizim, angina, Skarlatina, Revmatik isitma, Glomerulonefrit.

**“AGE-RELATED CLINICAL MANIFESTATIONS OF STREPTOCOCCAL
INFECTION IN CHILDREN”**

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Annotation. This article analyzes the age-related clinical manifestations of Streptococcal infection in children. Streptococcal infection is widely распространена among children, and its course depends on the child’s age, the state of the immune system, and the overall reactivity of the organism. The article highlights the differences in the main clinical symptoms of the disease from newborns to adolescence. In addition, the etiological role of Streptococcus pyogenes and its complications are also discussed. The results of the study are important for the early diagnosis and effective treatment of streptococcal infections in children.

Keywords. Streptococcal infection, Streptococcus pyogenes, children, age-related features, clinical manifestations, immune system, tonsillitis, Scarlet fever, Rheumatic fever, Glomerulonephritis.

“ВОЗРАСТНЫЕ ОСОБЕННОСТИ КЛИНИЧЕСКИХ ПРОЯВЛЕНИЙ СТРЕПТОКОККОВАЯ ИНФЕКЦИЯ У ДЕТЕЙ”

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Аннотация. В данной статье анализируются возрастные особенности клинических проявлений Стрептококковая инфекция у детей. Стрептококковая инфекция широко распространена среди детского населения, а её течение зависит от возраста ребёнка, состояния иммунной системы и реактивности организма. В статье освещены различия в основных клинических симптомах заболевания у детей от периода новорождённости до подросткового возраста. Также рассмотрена этиологическая роль *Streptococcus pyogenes* и возможные осложнения. Результаты исследования имеют важное значение для ранней диагностики и эффективного лечения стрептококковой инфекции у детей.

Ключевые слова. Стрептококковая инфекция, *Streptococcus pyogenes*, дети, возрастные особенности, клинические проявления, иммунная система, ангина, Скарлатина, Ревматическая лихорадка, Гломерулонефрит.

Introduction.

In recent years, infectious diseases have remained one of the most important medical and social problems in pediatrics. Among them, streptococcal infections occupy a significant place due to their high prevalence and potential to cause serious complications in children. The main causative agent of this group of diseases is *Streptococcus pyogenes*, which is characterized by high virulence and the ability to spread rapidly within the human population.

Children are particularly susceptible to streptococcal infection due to the immaturity of their immune system and reduced resistance of the organism. As a result, the clinical manifestations of the disease vary considerably depending on the child's age. In

newborns, the infection often takes a severe generalized course, whereas in older children it is more commonly manifested as localized inflammatory processes of the upper respiratory tract.

The relevance of this topic is determined by the fact that streptococcal infection may lead to severe complications if not diagnosed and treated in a timely manner. In particular, conditions such as Rheumatic fever and Glomerulonephritis can significantly affect the cardiovascular system, joints, and kidneys, leading to long-term health consequences.

Therefore, studying the age-related clinical features of streptococcal infections in children is essential for improving early diagnosis, prevention, and effective treatment strategies.

Main part. Streptococcal infection in children is one of the most common infectious diseases, and its clinical manifestations depend on the child's age, the level of immune system development, and the overall reactivity of the organism. The main causative agent of this infection is *Streptococcus pyogenes*, which usually enters the body through the upper respiratory tract.

In newborns, streptococcal infection often occurs in a severe and generalized form. Due to the immaturity of the immune system at this stage, the infection can rapidly spread into the bloodstream, leading to Neonatal sepsis. Clinically, this condition is manifested by unstable body temperature, respiratory distress, decreased sucking reflex, and general weakness.

During infancy (1 month to 1 year), the symptoms are relatively less severe but still present with characteristic features. The child may experience fever, irritability, sleep disturbances, and refusal to feed. In some cases, the infection may lead to complications such as otitis media or pneumonia.

In preschool children (1–6 years), streptococcal infection presents with more typical clinical signs. At this age, children often experience sore throat, difficulty swallowing, high fever, and enlargement of lymph nodes. In many cases, Scarlet fever develops, characterized by a fine red rash, “strawberry tongue,” and general intoxication symptoms.

In school-aged children (6–12 years), streptococcal infection most commonly appears as acute tonsillitis or pharyngitis. Clinically, inflammation of the tonsils, the presence of whitish exudates on them, headache, and general weakness are observed. The most important issue in this age group is the high risk of delayed complications. In particular, Rheumatic fever may damage the heart, joints, and central nervous system. Additionally, Glomerulonephritis may develop, leading to impaired kidney function.

In adolescence (12–18 years), streptococcal infection clinically resembles the course seen in adults. It is usually mild to moderate and presents with sore throat, fever, and general intoxication symptoms. However, improper or incomplete treatment may result in a chronic form of the disease.

Thus, the clinical course of streptococcal infection in children varies significantly depending on age. The younger the child, the more severe and generalized the disease tends to be, whereas in older children, localized inflammatory processes are more common. Therefore, considering the age-specific clinical features is essential for early diagnosis and appropriate treatment of the infection.

Experiment and results.

In this study, clinical and laboratory observations were conducted to evaluate streptococcal infection in children of different age groups. Data were collected from patients with suspected *Streptococcus pyogenes* infection, and clinical symptoms were compared across various ages.

Laboratory confirmation was performed using microbiological tests and rapid antigen detection methods. The results showed that streptococcal infection is more common in school-aged children, while severe generalized forms such as neonatal sepsis are mainly observed in newborns.

The findings also indicated that timely diagnosis and early treatment significantly reduce the risk of complications such as rheumatic fever and glomerulonephritis. Children who received appropriate antibiotic therapy showed faster recovery and fewer post-infectious complications compared to untreated or late-treated cases.

Conclusion.

In conclusion, streptococcal infection in children is widespread, and its clinical manifestations vary significantly depending on age. The main causative agent is *Streptococcus pyogenes*, which presents with different symptoms in different age groups.

In newborns, the infection most often occurs in a severe and generalized form, particularly as neonatal sepsis. In older children, the disease mainly affects the upper respiratory tract and manifests as tonsillitis (angina), pharyngitis, and scarlet fever.

In addition, failure to timely diagnose and adequately treat streptococcal infection may lead to serious delayed complications such as rheumatic fever and glomerulonephritis.

Therefore, a deep understanding of age-specific clinical features of streptococcal infection in children, early diagnosis, and appropriate treatment are essential in preventing severe disease progression and complications.

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