CLINICAL FEATURES OF SCARLET FEVER

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Summary. Streptococcal infection remains one of the most pressing health problems in all countries, which is determined by the widespread prevalence of group A streptococci and the enormous socio-economic damage caused by this pathology.

Keywords: fever, rash.

Streptococcal diseases are among the most frequently reported in the world. According to WHO, 18.1 million suffer from severe diseases caused by group A streptococci. About 1.8 million new cases are registered annually, over 500,000 people die, to this should be added over 11 million ases of streptoderma and 616 million cases of pharyngitis. Streptococcal sore throats occupy second place in the structure of acute respiratory diseases after influenza.

Streptococcal infections are anthropozoonotic diseases caused by various serogroups of staphylococci, which are caused by the development of diseases of the upper respiratory tract, skin lesions, autoimmune (rheumatism, glomerulonephritis) and toxic-septic (necrotic fasciitis, myositis, toxic shock syndrome, metatonsillar and peritonsillar abscesses, etc.) complications after the disease.

In Russia, about 2.8 million (2008) cases of streptococcal etiology have been registered. In the Russian Federation, the incidence of scarlet fever in children under 14 in recent years has been 200-250 per 100,000 children. The clinical characteristics of streptococcal infection in children under modern conditions are presented. Moderate forms of the disease predominate in hospitalized patients (85.8% for scarlet fever, 72.3% for streptococcal angina). The incidence of complications of scarlet fever is 11.1%. Complications include: otitis media (50.0%), tonsillitis in the late stages of the disease (33.3%), peritonsillar infiltrate (5.6%), peritonsillar abscess (11.1%). Allergic complications were not observed. Scarlet fever is the most common primary streptococcal infection. Based on prevalence and clinical and epidemiological manifestations, one can draw a conclusion about the incidence of streptococcal infections in general, especially group A streptococcal infections, and the patterns of development of the epidemic process. In scarlet fever, the pathogens are patients with various clinical forms of acute streptococcal diseases and carriers of pathogenic streptococci. Scarlet fever can develop after streptococcal impetigo or secondary infection of skin lesions with streptococci (extrabuccal form). Of great epidemiological significance as a source of infection are patients with streptococci of the upper respiratory tract (scarlet fever, tonsillitis, streptococcal acute respiratory infection).

Such patients are highly contagious, and the streptococci they excrete retain the main virulence factors - the capsule and M-protein. Therefore, they often experience transmission of the disease from these patients to susceptible people with the development of the disease with obvious symptoms. Patients with non-respiratory forms of streptococcal diseases (streptococcal pyoderma, otitis, mastoiditis, osteomyelitis, etc.) Such patients are highly contagious, and the streptococci they excrete retain the main virulence factors - the capsule and M-protein. Therefore, they often experience transmission of the disease from these patients to susceptible people with the development of the disease with obvious symptoms.

Patients with non-respiratory forms of streptococcal diseases (streptococcal pyoderma, otitis, mastoiditis, osteomyelitis, etc.)

she is less epidemiologically significant as a source of infection due to the fact that the excretion of the pathogen from her body is not very active. Patients with other manifestations of streptococcosis can be considered epidemiologically the most dangerous as a source of infection.

This is explained, first of all, by the specific size of the microbial center in the location of streptococci and the high virulence of streptococci. The first days of the disease are dangerous for those around the sick person, the infectious period of the patient ends three weeks after the onset of the disease. The latent period of scarlet fever lasts from several hours to seven days. During this time, the causative agent of scarlet fever increases in the body, after which it is released into the environment in large quantities. After treatment, it is possible to detect the sources of scarlet fever and sore throat, as well as sources of inflammation. It is assumed that the carrier state of the bacteria from the patient is the result of the fight against the disease.

Healthy carriers of bacteria, like sick ones, are highly infectious, and streptococci in their bodies are able to maintain their virulence for up to a month. Long-term bacterial transport of streptococci is observed in patients who have suffered from chronic diseases of the upper respiratory tract (tonsillitis, nasopharyngitis). The largest group of infection sources are carriers of beneficial bacteria. According to the mechanism of formation, such a healthy carrier of bacteria is observed in people with immunity. During periods of epidemiological calm in scarlet fever, the percentage of carriers of healthy bacteria can be 5-15% of the healthy population.

Most of them have a trigger that is separated for a long time (months, years). Streptococci isolated from healthy carriers of bacteria are characterized by low virulence, and therefore, are low-contagious. As the number of non-immune individuals in the population increases, the carriage of healthy bacteria gradually becomes more active, and the virulence of the isolated pathogen increases. Along with the change in the nature of carriers, the proportion of carriers among the population increases, resulting in the formation of one or two serological types of streptococci with high virulence. The

properties of streptococci strains isolated from healthy carriers in different seasons of the year are not the same.

During the period of the highest incidence rate (January, February), the virulence of pathogens is high. The source of pathogens is preserved by long-term carriers of streptococcus (2-6 months, 1 year and more). Although the role of patients with various clinical forms of scarlet fever and other streptococcal infections as a source of infection is higher than the role of bacteria carriers, especially healthy bacteria carriers, one must not forget the importance of healthy bacteria carriers as a source of infection.

The widespread distribution of carriers of bacteria among the population, a large percentage of people with large microbial foci among carriers of bacteria ensures a large release of pathogens into the environment, a large proportion of strains with high virulence among the isolated strains requires the inclusion of carriers of healthy group A streptococci in the category of epidemiologically dangerous sources of infection. At present, the goal of epidemiological control of streptococcal infection is the prevention of primary cases of rheumatism, the prevention of group diseases of streptococcal infection and scarlet fever, as well as the reduction of the incidence of streptococcal respiratory infection and angina. Specific prophylaxis of scarlet fever with antitoxic serum is not usually performed. There is no information on the creation of anatoxin for active prophylaxis of scarlet fever. In recent years, partial progress has been achieved in the development of vaccines against diseases caused by group A streptococci.

It is difficult to say how widely they are used. However, two groups of people will certainly benefit from the vaccine: the military, members of certain organized communities and the weakened.

References:

1. Анохин В.А. Стрептококковая инфекция у детей и подростков // Практическая медицина. Общество с ограниченной ответственностью «Практика». — 2008. — №31. — С.8—14.

2. Афанасьева Н.А. Инфекционно—воспалительные заболевания полости рта и глотки // Российский медицинский журнал = Russian medical journal : Двухмес. науч.—практ. журн. — М. : Медицина, 2007. — № 5. — С.21— 25.

3. Афанасьева Н.Н. Псевдотуберкулез у детей // Медицина в Кузбасе : науч.—практ. журн. / Кемеровская гос. Мед. академия. — Кемерово : НП «ИД Медицина и Просвещение», Кузбас, 2008. — № 1. — С.3—5.

4. Балабанова Р.М., Гришаева Т.П. Инфекция горла — современный взгляд на методы диагностики и принципы терапии А-стрептококковой инфекции глотки // Consilium medicum. — 2004. — Т.6. — № 10. — С. 23—25.

5. Белобородов В.Б. Оптимизация применения защищенных пенициллинов для лечения инфекций дыхательных путей // Российский медицинский журнал

= Russian medical journal: Двухмес. науч.-практ. журн. — М. : Медицина, 2007. —№ 18. —С. 12—13.

6. Беляков В.Д., Брико Н.И. // Здоровье населения и среда обитания: Информационный бюллетень / Федеральный цент государственного санитарно— эпидемиологического надзора. М. : ВНиСО. Ежемес., 1994 — № 10 (19) — С.4—7.

7. Белякова И.В. OF-типирование при изучении эпидемического процесса стрептококковой инфекции // Журнал микробиологии эпидемиологии и иммунологии / Минздрав РФ. — М. : Медицина, 1993. — № 2. — С.48— 49.

8. Келдиёрова З.Д. Состояние иммунной системы у детей с инфекционным мононуклеозом и обоснование иммунокорригируюшей терапии.// Central Asian Journal Of Medical and Natural Sciences. http://cajmns.centralasianstudies.org/index.php/CAJMNS/article/view/422/3972.

9. Келдиёрова З.Д. Иммунологические особенности инфекционного мононуклеоза эпштейна-барр-вирусной этиологии у детей.// Новый день в медицине. Бухоро - №2 (34). 2021. https://newdaymedicine.com. Б. 231-234