

Streptoderma Treatment in Children: Local and Systemic Approaches

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Abstract: Streptoderma is one of the most common dermatological diseases. The issues of organizing effective treatment of Streptoderma are of particular relevance in pediatric practice, as well as in chronic patients. A rational choice of drugs on the pharmaceutical market is of great therapeutic importance in organizing the treatment of patients with streptoderma.

Keywords: bacterial skin infections, infectious disease, in children, foci of the disease.

Despite the significant achievements, the issue of effective treatment of infectious diseases is becoming increasingly important in medicine and pharmacy, and the search for new drugs that will provide a fundamentally new level of medical and pharmaceutical care to patients has the great socioeconomic importance. According to the literature, every year bacterial infections are becoming an increasing problem, both in terms of medicine and at different levels of organization of medical and pharmaceutical care in the national health care systems. The enormous socio-economic losses, which are observed as a result of loss of the health, the quality of life, and sometimes life itself in adult patients and children necessitate constant review of existing approaches to improving the effectiveness of treatment of patients with bacterial infections, including in dermatological and pediatric practice. According to the literature, the most common pathogens of the bacterial infections that lead to pathological conditions are streptococcus and staphylococcus. For example, *Streptococcus pyogenes* leads to the development of pathological conditions in humans in a wide range of the clinical manifestations - from pharyngitis and mild superficial skin lesions (impetigo) to extremely severe systemic diseases. Untimely and ineffectively treated bacterial infection on the mucous membrane or skin can further lead to serious consequences, namely the development of cardiovascular disease, sepsis, autoimmune diseases, as well as life-threatening the toxic shock syndrome in patients. Unfortunately, the emergence of highly resistant strains of streptococcal and staphylococcal infection has become a serious problem in improving the effectiveness of the treatment of patients with pathologies caused by the bacterial pathogens.

Streptoderma is an infectious disease caused by opportunistic microorganisms. Severe skin lesions most often appear in children and women. In the absence of timely treatment, dangerous complications are possible.

Streptoderma is an infectious disease that requires full treatment with medications. Most often, streptoderma is diagnosed in childhood, so the treatment of the infection must be approached responsibly, relying on the competent opinion of a doctor in the matter of choosing medications exclusively.

Which doctor should the patient contact?

When the first symptoms of streptoderma appear (reddening of the skin, the appearance of rashes and crusts with clear localization) in children, it is necessary to seek help from a dermatologist. Only a qualified specialist can correctly diagnose the disease (the symptoms of many skin pathologies are similar), determine the type of streptoderma and select effective treatment.

Causes of streptoderma in children and adults.

Often, the human immune system copes with external risks. The causative agent of the disease is group A hemolytic streptococcus. The pathogenic microorganism affects not only the skin. A negative effect of streptococcal infection on the heart and kidneys has been noted. Allergic dermatitis and serious

autoimmune diseases often occur. But streptococcus can be dangerous if the following provoking factors are present:

- ✓ Mechanical damage to the skin, including abrasions, scratches and cracks;
- ✓ Poor immunity, vitamin deficiency, various disorders of the endocrine system;
- ✓ Exposure to temperature or humidity changes, due to which the skin peels and cracks;
- ✓ Intoxication of the body, various infectious diseases;
- ✓ Incorrectly selected hygiene products, improper skin care, changes in pH;

Concomitant dermatological diseases, sunburn, frostbite, stressful situations, hormonal imbalance in the body, overwork, varicose veins, abrasions, obesity, insufficient skin care, sharing utensils, towels, toothbrushes can be also observed as the causes of the disease.

The presence of any of the causes increases the likelihood of contracting streptoderma. At risk are small children who attend school or kindergarten, patients with allergic reactions and immune disorders, people who often suffer from ENT diseases. A serious problem is when a person is weakened by the influence of the external environment, ecology, the course and exacerbation of chronic diseases. Streptoderma in a child is the result of a combination of poor immunity and poor nutrition, frequent trauma to the skin, taking into account the poor sanitary and hygienic situation. In such cases, the development of an infectious disease and an inflammatory process, complex consequences of streptoderma, secondary infections with corresponding symptoms and risks are possible.

Streptoderma is contagious and is transmitted by contact or contact-household means - through direct contact, direct touch, as well as through household items that all members of the family or a certain community touch. It is important to be careful, adhere to the basics of hygiene, use only personal things and objects, and seek help if you have symptoms of streptoderma or other dermatological diseases, skin infections.

Signs of streptoderma – symptoms:

The skin turns red, and a small bubble (phlycten) appears on the affected area, filled with a cloudy liquid of a dirty yellow color.

The formation quickly increases, reaching 1–2 cm. In some types of disease, conflicts grow up to three centimeters.

Sometimes a large number of blisters leads to the appearance of a continuous affected surface on a certain area of the body.

After maturation, the bubble bursts, an ulcer appears with remnants of skin around the edges.

The opened conflict dries quickly and dense crusts form.

All stages of the disease are accompanied by burning and itching. The patient scratches the skin, the infection spreads to healthy areas. How is streptoderma transmitted? When using shared pillowcases, household items, and towels, the infection can affect family members.

The foci of the disease appear in the folds of the skin - under the breasts, behind the ears, in the groin area, under the buttocks, and also in the armpits. Streptoderma is possible on the face, hands and feet, on the skin of the arms and legs. Localization has a direct dependence on the form of pathology. So, angular cheilitis appears in the corners of the lips, bullous impetigo - on the feet and shins, hands, and streptococcal impetigo affects the trunk and limbs!

Initially, slight redness and foci of inflammation appear on the surface of the skin. In their place, small, non-tense blisters form, and then the blisters quickly open with the formation of crusts. One of the main signs is rapid spread with the coverage of increasing areas of damage, spreading to other areas of the skin!

Symptoms of pyoderma may vary depending on the form, but the following signs of streptococcal skin infection are most common:

- ✓ Acute onset and progression;
- ✓ Painful skin in areas where purulent-vesicular rashes are localized;
- ✓ Erythema with clear boundaries, increased body temperature;
- ✓ Possible inflammation of the lymph nodes near the affected area;
- ✓ General malaise, muscle aches, fatigue;
- ✓ Constant itching of the skin, peeling, formation of cracks and open wounds.

Outwardly, many dermatological diseases are almost identical, which indicates the need for a medical examination and clinical diagnostics to confirm the initial findings. Herpes and streptoderma, infection on the lips and atopic dermatitis, as well as urticaria, eczema and a number of other skin pathologies are similar. It is important not to study photos of streptoderma, comparing the manifestations of the infection in yourself or your child, but to promptly seek help and undergo an examination.

Streptoderma in a child - stages of the disease and its course:

The course of a skin infection, its development and manifestations:

- Primarily, these are minor rashes on the child's skin, small blisters filled with liquid. The rash does not attract attention, does not bother, but is quite dangerous. Its damage, when the baby scratches his face, arms or legs, leads to seeding with infectious contents, the spread of streptococci on the skin occurs. Already at the initial stages of the development of streptoderma in a child, treatment will be appropriate, as it will limit the expansion of pathology zones;
- Ignoring the treatment of streptococcal infection leads to a change in foci and suppuration, inflammation of the skin nearby, an increase in blisters and the formation of rougher crusts. In appearance, these are red or brown wounds with a halo, from which pus flows out little by little. If streptoderma develops on the head - hair falls out, becomes thinner, breaks;
- The next stage is extensive coverage of skin areas by the infectious process. Streptoderma in children on the face, cheeks and around the mouth, on the head under the hair, in other areas is painful. Nearby lymph nodes become inflamed!

Even in the initial stages, the disease is unpleasant, but it also tends to develop in accordance with environmental conditions, human behavior, other pathologies in the presence. It is possible to form deep cracks on the lips, poorly healing wounds, coverage of a larger localization, and then the appearance of scars and scars from streptoderma after treatment and healing of the affected areas, the manifestation of temporary or permanent hypopigmentation of the skin. More serious complications that negatively affect the quality of life and human health are the formation of boils, psoriasis and microbial eczema, phlegmon. Timely treatment of streptoderma in a child and an adult allows you to reduce such concerns to zero.

It is very important to conduct differential diagnostics, which only a qualified dermatologist can do. Some symptoms are similar to other dermatological diseases, which is fraught with problems if you decide to treat streptoderma yourself, at home. Ignoring clinical studies, there is a possibility of making a mistake when urticaria, some symptoms of diathesis and atopy, pityriasis versicolor and eczema are almost identical in external signs, or when you compare photographs of streptoderma and herpes on the lips, as well as photographs of other skin pathologies with external manifestations of the disease on the skin of a child or on yourself.

A visual examination in the doctor's office is only the first step. For accurate identification and confirmation of the diagnosis, bacterial culture and microscopic analysis are performed. A general blood test, glucose level test, bacteriological analysis of scrapings, as well as additional consultations

with a pediatrician, therapist and endocrinologist may be prescribed. Remember. If you have been diagnosed and confirmed with streptoderma, treatment must be started immediately!

Complications:

Treatment should be started immediately. A tendency to allergies and lack of timely treatment increases the sensitivity of the affected skin. Other pathogenic microbes penetrate through wounds and cracks. Advanced dry streptoderma often leads to microbial eczema. The presence of a new form of the disease is indicated by inflammation of the ulcers and separating drops of turbid serous fluid.

Diagnosis of streptoderma in children

A visit to a pediatrician and dermatologist will help establish an accurate diagnosis. Before visiting a doctor:

- ✓ write down the date of detection of the first signs of the disease;
- ✓ assess the child's condition;
- ✓ analyze the rate of spread of infection;
- ✓ measure the temperature.

Detailed information will help the specialist establish the correct diagnosis. In addition to the examination, the doctor will prescribe a bacterial culture of the contents of the ulcers and blisters.

How to quickly cure streptoderma in a child or an adult?

There are individual schemes, the effect of which is increased, but only if the skin infectious disease is detected and confirmed early, as well as in case of compliance with the plan and rules for the treatment of streptoderma. It is necessary to use the medications prescribed by the attending physician, limit the impact on the affected area of water, adhere to the schedule for treating spots in the foci of development. Treatment of streptoderma is carried out at home with strict adherence to the recommendations received.

The focus of infection is treated with antiseptic agents without affecting other areas of the skin to prevent the spread of the infectious process. In mild forms of streptoderma - ointments and other topical drugs, in the case of spread and the occurrence of multiple foci - antibiotic therapy with a preliminary analysis of the absence of an allergic reaction.

Penicillin drugs, cyphosporins, macrolides can be prescribed. Medicines are prescribed strictly by a doctor, who additionally regulates the regimens, nutrition, maintenance therapy. If streptoderma is confirmed by a dermatologist, the treatment will comply with the protocol requirements, so the patient should completely trust the doctor and not make independent decisions.

Streptoderma – prevention of skin infection:

Having noticed the first signs of the disease, parents should immediately contact a dermatologist. Only a highly qualified specialist can make a diagnosis and prescribe treatment, especially when it concerns children's health.

Considering the environmental situation, heredity and a number of chronic diseases, the likelihood of developing streptoderma in a child or an adult, as well as other skin pathologies, increases significantly.

Parents should provide the child with separate dishes, hygiene items (towel, soap, shampoo, etc.). The space in which the child is located must be regularly ventilated, and the objects he touches must be disinfected.

With streptoderma, it is advisable to buy clothes made of natural materials so that the child does not sweat. But there are standard rules of prevention, thanks to which the risks can be minimized:

- It is important to promptly and correctly treat skin damage - scratches, abrasions, cuts and bites, treat skin inflammation and suppuration;
- Proper nutrition containing vitamins and a complex of micro- and macroelement base will strengthen the immune system and resist infections;
- One of the most effective ways to avoid the spread of infection and complications is timely visit to the doctor.

During treatment, it is very important to observe the rules of personal hygiene: it is needed to limit washing parts of the body where there is no inflammation, to use wet towels, napkins; not comb or touch the affected areas of the skin;

The patient must have an individual towel, dishes, and bedding, which must be washed and washed frequently; treat all minor injuries and scratches; clean the premises regularly; in contact with the child there should be no soft toys.

The most common method of treatment is local therapy and compliance with certain rules. Children at the initial stage of the disease are prescribed wiping ulcers and pustules with iodine or brilliant green, they act as a disinfectant and effectively get rid of harmful microorganisms. Chamomile lotions and baths will help relieve inflammation. A more severe course of the disease is treated with gene therapy, vitamin preparations, ultraviolet irradiation of blood.

Timely wound treatment and treatment directed in the right direction will help your baby recover faster. Therefore, before making a final decision on treatment, we recommend visiting several doctors. Our clinic has excellent specialists who will help maintain a healthy lifestyle and prevent the development of streptococcal disease. A disease such as streptoderma cannot be prevented. The prevalence of streptococci is very high. But you can reduce the likelihood of illness by strengthening your child's immunity. And here, adherence to a daily routine, a balanced diet, and physical activity are very important. They also help a lot. The child must follow the rules of hygiene. In kindergartens and schools, the risk of the disease increases. Germs easily penetrate through cuts, scrapes and abrasions. Lack of timely treatment leads to serious complications.

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