



RHEUMATISM IN CHILDREN

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Abstract. *Rheumatism is a systemic inflammation of all tissues in the body, mainly localized in the pericardium. Especially the heart, joint and subcutaneous connective tissue in the body are prone to disease. Rheumatism can be caused by simple angina, which is common among people. Tonsillitis itself is acute, accompanied by fever, headache, and inflammation in rheumatic fever leads to chronic heart valve damage, which can lead to disability or death many years after the acute illness. can bring.*

Usually, rheumatism affects children between the ages of 5 and 15, but adults can also get sick. The first symptoms of rheumatism often begin to appear 1-5 weeks after angina. Rheumatic attacks usually last three months, rarely more than six months.

Key words: *Types of the disease: classification of rheumatism, symptoms of rheumatism: how the disease manifests, actions of the patient in rheumatism, diagnosis of rheumatism, treatment of rheumatism, complications of rheumatism, prevention of rheumatism*

INTRODUCTION

RHEUMATISM: CAUSES AND FACTORS OF DEVELOPMENT

Currently, three main reasons for the development of rheumatism are distinguished:

Past illnesses. Group A streptococci affect the development of the disease. If a person has been sick several times with infectious diseases of group A streptococci, there is a possibility of developing a pathological process, and as a result, rheumatism can occur. However, the serological subgroup of streptococcus in the patient is important. In some cases, rheumatism can develop even after a single infection with hemolytic group A streptococcus. Especially if the patient, for example, is infected with ARVI and does not take appropriate treatment measures, the risk of developing



rheumatic lesions increases.

Allergy. Allergic reaction can be caused both directly by the streptococcus itself and due to the substances it secretes (toxins and enzyme proteins). As toxins enter the bloodstream and spread throughout the body, the immune response must also be systemic. However, this immune response results in more damage to the heart and joints. It should be noted that the chronic form of rheumatism is not associated with streptococcal infection. Antibodies against streptococci are not detected in chronic rheumatism.

Hereditary predisposition. It should be mentioned at once that rheumatism is not transmitted from generation to generation. However, when infected with streptococcus, a high tendency to the development of rheumatism can be inherited.

METHOD AND METHODOLOGY

Acute rheumatism. This form of rheumatism occurs in people under 20 years of age. The causative agent of the acute form of rheumatism is streptococcus. When rheumatism is combined with an upper respiratory tract infection, a delay in symptoms (usually 14-21 days) is noted. A characteristic feature of acute rheumatism is the speed of its development. At first, patients are bothered by symptoms of general intoxication, such as in colds and flu. The similarity of these symptoms does not allow to immediately identify this disease. After some time, specific symptoms such as carditis, polyarthritis, rashes on the skin, and sometimes skin nodules begin to be felt. The acute period of the disease lasts up to three months. In some cases, acute rheumatism lasts up to 6 months. **Chronic rheumatism.** As for the chronic form of rheumatism, it is characterized by frequent relapses, even if the patient receives appropriate treatment in time. In particular, exacerbation of chronic rheumatism often occurs in the autumn-winter season, because cold is a serious provoking factor. In addition, staying (or living) for a long time in places with high humidity contributes to the exacerbation of the disease. As a rule, attacks of chronic rheumatism occur several times a year. **Joint form of rheumatism.** In the articular (articular) form of rheumatism, only the joints or joints with the heart can be damaged. Usually, the articular form of rheumatism affects large joints, and in the last stages, the pathological process covers small joints as well. Gradually, damage to the joint bag and ankles occurs. Due to severe pain, it becomes difficult for the patient to move the damaged joint. In the acute form of joint rheumatism or during an attack, the body temperature can rise up to 39 °C.

Neurological form of rheumatism. Rheumatic damage to the nervous system is



less common than joint and heart damage. In the neurological form of rheumatism, the cells of the cerebral cortex responsible for movement are damaged. Therefore, involuntary movements of the patient's limbs or facial muscles are recorded.

Pulmonary form of rheumatism. It is observed very rarely, accounting for about 1-3% of all cases of rheumatism. Usually, the pulmonary form of rheumatism manifests itself in the form of bronchitis or pleurisy.

Cutaneous form of rheumatism. This form of the disease manifests itself in the form of skin rashes or specific rheumatic nodules. The skin form of the disease does not exceed 5% of the total number of patients with rheumatism.

Ophthalmological form of rheumatism. This form of the disease is determined only in combination with the classic symptoms of rheumatism. Usually, the ophthalmological form affects the retina. The ophthalmological form of rheumatism can lead to partial or complete blindness.

RESEARCH RESULTS

SYMPTOMS OF RHEUMATISM: HOW THE DISEASE APPEARS

Rheumatism is not a single disease. Often it "neighbors" with other pathologies, because harmful substances secreted by streptococci and immune antibodies damage many organs and systems, and all such manifestations can be considered forms of rheumatism.

The first symptoms of rheumatism do not allow to identify the disease. They appear 2-3 weeks after an upper respiratory tract infection (pharyngitis, laryngitis, tonsillitis) transferred from a streptococcal head injury. The picture looks like a recurrence of a cold. Symptoms of acute rheumatism are manifested as an increase in body temperature, sometimes up to 40 degrees, rapid pulse, fever, profuse sweating, weakness, swelling and pain in the joints. First, the largest and most actively used joints are damaged.

Then the inflammation often spreads symmetrically to other joints. Joints are strongly swollen, reddened, hot to the touch, painful when pressed or moved. Usually, the inflammatory process does not lead to permanent changes in the joints. The pulse is accelerated, arrhythmic, pain in the chest is noted, dilatation (enlargement) of the heart, sometimes the sound of friction of the pericardium is heard - this indicates heart damage.

General symptoms of rheumatism:

Hyperthermia. Body temperature rises to dangerous levels (38.0-40.0 °C). This symptom is associated with the development of an acute immune reaction against



pathogens;

Weakness. According to the description of the patients, the body remains "cotton" empty, always sleepy;

Headache. It is localized on the forehead. Specific symptoms of rheumatism:

Pain in the joints. First, large joints (knees, elbows) are damaged, the pain is persistent and lasts a long time. Rheumatism is characterized by the rapid development of the process, as well as the rapid disappearance of inflammation and pain in the joints and the restoration of their function;

Pain behind the sternum. Persistent or throbbing pains in the heart area. This symptom does not appear immediately, but occurs after one or several days;

Vascular disorders. Fragility of blood vessels, nosebleeds, etc.;

Annular rashes. It is manifested in less than 4-10 percent of all cases. They look like a pink rash, forming a circle with uneven edges. Does not disturb the patient in any way;

Rheumatic nodes. It is formed in damaged joints. They appear as subcutaneous formations with a diameter of 5 mm to 2-3 centimeters, dense and motionless, painless. They are very rare and last for about two months after the onset of the disease.

Specific symptoms appear only after 1-3 days. Sometimes there are signs of damage to the abdominal organs (pain under the right rib, etc.). This indicates that the disease is serious and requires immediate hospitalization.

In children, rheumatism is much milder or chronic, without special symptoms. General weakness, pulse rate and pain in the joints are noted, pain is not felt when moving. If there are no signs of heart damage, the disease rarely ends in death, but with the development of carditis, the average life expectancy of patients in the future is significantly reduced.

ACTIONS OF THE PATIENT IN RHEUMATISM

Consult a doctor to prevent possible complications. If the disease is confirmed to be of streptococcal etiology, antibiotics are prescribed. Try to complete antibiotic therapy.

DIAGNOSIS OF RHEUMATISM

Diagnosis of rheumatism includes a number of laboratory and instrumental studies, including:

Ultrasound examination (UTT); Electrocardiogram (ECG);

Laboratory blood test for specific antibodies and factors.



DISCUSSION

TREATMENT OF RHEUMATISM BICILLIN

Rheumatism is a pathology of mixed immune-bacteriological nature. Therefore, it is difficult to treat rheumatism and it cannot be completely cured. Since the main source of the disease is streptococcal bacteria (and the immune reaction is a response to the "attack" of a secondary and foreign organism), the main goal of treatment is to eliminate the bacteria and quickly remove the substances released as a result of their life activity and decomposition.

The main (and main) drug to fight this pathogen is bicillin. Bicillin is an antibiotic of the penicillin family and has a longer duration of action than regular penicillin.

The first (active) stage of antibiotic treatment lasts from 10 to 14 days. Studies have shown that a shorter period is not appropriate, because the infection persists, and a longer period is useless, because the streptococcus begins to produce substances that break down the antibiotic, and the antibiotic itself harms the patient.

After that, the second (passive) stage begins. Three weeks after the end of taking Bicillin orally, the same drug is injected into the patient. Such treatment should be continued for 5-6 years (1 injection every 3 weeks), which is necessary to reduce the likelihood of relapse and prevent the development of heart complications.

ASPIRIN

Acetylsalicylic acid has proven itself well in medical practice. Aspirin has many contraindications (pregnancy and breastfeeding, vascular fragility, problems with digestive organs), but this therapy of rheumatism is useful in articular and neurological forms of the disease. Aspirin relieves pain and reduces inflammation in the joints. The first two weeks are taken in the maximum permissible doses.

After the main period of therapy, aspirin is taken at a dose of 2 g/day for another 30 days.

Attention: Aspirin affects the mucous membrane of the stomach and duodenum. Such a side effect is often observed, especially if the recommendations for taking the drug are violated.

This leads to erosion, peptic ulcer, gastroduodenitis and ulcerative bleeding.

HORMONAL PREPARATIONS

In the treatment of severe forms of rheumatism, the maximum permissible dose of prednisolone is used.

CONCLUSION



GENERAL RECOMMENDATIONS

If the disease is mild, half-bed rest for up to 10 days is prescribed. If the disease is serious, it is necessary to exclude any movement activity, because it aggravates the process. A bed arrangement is set for a period of up to one month.

Laboratory analyzes are conducted to evaluate the effectiveness of treatment. When the indicators approach normal levels, the bed regimen can be canceled. If the disease is very serious, with significant heart rhythm disturbances, pain in the joints, inpatient treatment for up to two months is required.

COMPLICATIONS OF RHEUMATISM

Brain damage. Rheumatic heart diseases, for example, may develop complications such as myocarditis (inflammation of the heart muscle), endocarditis (inflammation of the inner lining of the heart) and pericarditis (inflammation of the outer lining of the heart). In severe cases, death occurs.

PREVENTION OF RHEUMATISM

If you have a sore throat for more than a week, see your doctor because your throat may be infected with group A streptococcus. It is recommended to maintain good sanitary conditions in your place of residence and avoid crowded places. Stimulate the body's natural defenses. Wash your hands thoroughly before starting to prepare food, especially if you cough or sneeze. In this way, you prevent the spread of bacteria that cause angina.

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