



Rheumatic Fever

What is rheumatic fever?

Rheumatic fever is a disease that causes inflammation, swelling, and redness of various body tissues and organs. Permanent damage and scarring of the heart and heart valves may also occur. The disease can damage the joints, central nervous system, and skin. Rheumatic fever is rare. When it does occur, it is most common in children ages 5 to 15.

What is the cause?

Rheumatic fever is a rare complication of a strep throat or scarlet fever infection. It is caused by the group A Streptococcus bacteria. Rheumatic fever occurs within 1 to 5 weeks after having strep throat or scarlet fever. Exactly why and how it occurs is not well understood. It is thought that proteins of the Streptococcus germ have a similar protein structure to the protein structures in the heart valves and other parts of the body. When you form antibodies against the Strep proteins, some of them react with your own proteins. This could lead to inflammation and damage.

What are the symptoms?

Symptoms of rheumatic fever are similar to many other types of illness. This is why a diagnosis cannot be made from just one sign or symptom. Signs and symptoms that are used to make the diagnosis are called the Jones criteria. The criteria are broken into the major and the minor criteria.

Major criteria include:

- Inflammation of the heart
- Aching and swollen joints (ankles, knees, elbows, wrists), with the pain and swelling often moving from joint to joint
- A red rash
- Uncontrolled movement of limbs and the face, and
- Lumps under the skin

Minor criteria include:

- Fever
- Joint pain
- Blood tests that show inflammation
- Heart rhythm problems shown on a ECG

- Chest pain
- Shortness of breath
- Awkwardness and a tendency to drop things.

How is it diagnosed?

Your child will be tested to see if he or she has or has had a recent a group A Strep infection. If your child has had a strep infection, your provider will check to see how many of the rheumatic fever criteria your child has. Your child probably has rheumatic fever if he or she also has two of the major criteria or one major plus two of the minor criteria.

How is it treated?

Your child will need to start taking antibiotics to make sure all the strep is gone. Your child's provider will also consider other medicines based on your child's symptoms.

Have your child:

- Rest in bed and rest while recovering (strict bed rest is not needed)
- Drink lots of fluids
- Take any medicines as prescribed.

How can I help prevent a relapse of rheumatic fever?

The best prevention for children who have already had rheumatic fever is to take antibiotic medicines for several years to prevent another strep infection. Recurrent strep infections are common during the first 3 to 5 years after recovery without antibiotic therapy. Your child can get monthly shots or take oral antibiotics daily. Antibiotics may also need to be taken before surgery or dental work to prevent an infection. Ask you child's health care provider how long your child will need to take antibiotics.

How long does it last?

Rheumatic fever can last from 6 weeks to more than 6 months. Some of the damage, particularly to the heart, may be permanent. Your child's long-term health depends on how his or her heart has been affected by the disease. Rheumatic fever can weaken the heart muscle cells and interfere with the heart's ability to pump. The inflammation may also affect the heart valves. The valves may become deformed and not close or open properly. This damage to the valves may not show up until years after the illness.

When should I call my child's health care provider?

Call during office hours if your child:

- Has a sore throat again
- Has trouble breathing
- Has pain near the heart
- Has a fever over 101.5°F even while taking antibiotics.

*NOTE: This information is provided as a public educational service. The information does not replace any of the instructions your physician gives you. If you have a medical emergency please call 911 or call the Hospital at (208) 529-6111. If you have questions about your child's care, please call Idaho Falls Pediatrics at (208) 522-4600.