

Kawasaki Disease

What to Expect

What is Kawasaki Disease?

Kawasaki disease (Cow-a-saw-kee) is an illness that young children, usually younger than 5 years old, can get. It causes swelling and inflammation of the small blood vessels in the body (vasculitis). No one knows what causes it. The illness can last up to a few months.

The swelling can be especially dangerous because it can damage the vessels of the heart.

Your child will appear very ill, have a rash, and be fussy. Heart complications occur in about 20% of untreated children. Most children recover without any problems when treated with aspirin and IVIG (intravenous immunoglobulin). However, some children do not respond to IVIG and need further treatment.

How is it diagnosed?

There is no specific test that can diagnose Kawasaki disease. Symptoms can show up at different times and come and go. Doctors diagnose Kawasaki disease when they see a few or all of these symptoms:

- Fever that lasts for at least 4 to 5 days
- Red, blood-shot eyes called conjunctivitis (kon-junk-ti-vi-tis)
- Swollen lymph nodes of the neck and armpits called lymphadenopathy (lim-fad-e-nop-a-thee)
- Rash on different or all parts of the body
- Red, cracked lips, very red tongue (strawberry tongue), redness in the mouth and the back of the throat
- Swollen and red hands and feet followed by peeling skin on the fingers and toes
- Blood tests that show that your child has swelling (inflammation)
- Also, children with Kawasaki disease are often very fussy.

It can be hard to diagnose because there are other illnesses that can cause these symptoms. To make sure your child gets the correct diagnosis, doctors, and specialists from other areas (such as rheumatology and infectious disease) will be involved in your child's care. They may use blood tests, such as C-reactive protein and complete blood count (CBC), to help support your child's diagnosis.

To Learn More

- Heart Center
206-987-2015
- Ask your child's healthcare provider
- seattlechildrens.org
- Kdfoundation.org

Free Interpreter Services

- In the hospital, ask your nurse.
- From outside the hospital, call the toll-free Family Interpreting Line, 1-866-583-1527. Tell the interpreter the name or extension you need.

What is the treatment?

In the hospital, your child will get medicines to decrease the swelling in the vessels and to decrease the chance that it will affect the heart. These medicines are aspirin and IVIG (intravenous immunoglobulin).

IVIG is a medicine used to decrease inflammation. It is given slowly through an IV into a vein over 12 hours. It is usually given just one time. Your child will need to stay at the hospital for at least 2 days after the IVIG infusion. During your child's stay their healthcare team will:

- Do other tests of your child's heart. An ultrasound of the heart called an echocardiogram, or echo, is used to look for damage to the heart or vessels near the heart. An electrocardiogram (called an EKG or ECG) will help your child's healthcare team understand how healthy your child's heart is.
- Teach you how to check your child's temperature and who and when to call if your child has a fever.
- Share information with your child's community doctor that they will need to take care of your child once you leave the hospital.
- Schedule a follow-up appointment, for 2 weeks and 6 weeks after you leave the hospital, with a heart doctor.

Some children with aneurysms need to take other medicines to prevent clotting. Pharmacists who have specialized training with these medicines will be available in the Kawasaki Clinic to speak with you about this.

Is aspirin safe for my child? What about Reye Syndrome?

Aspirin is a safe medicine given to reduce inflammation in the first stages of the illness. As your child improves the dose will be decreased. After going home from the hospital, your child only needs to take a low dose of aspirin (81 mg or less depending on their size), sometimes called a baby aspirin. Aspirin is then continued for 6 to 8 weeks to prevent your child's blood from making clots.

Reye syndrome is a very rare condition of liver and brain swelling. No one has found an association between Reye Syndrome and aspirin used in the treatment of Kawasaki disease. Aspirin was associated with Reye Syndrome in the 1970's and 1980's when it was used in extremely high doses to treat viral illnesses, like the flu and chickenpox.

How long does Kawasaki disease last?

It may take a few weeks for your child to start to feel better and about 6 to 8 weeks for your child to fully recover from the illness.

It is normal for your child to be irritable and anxious for 2 to 3 weeks after going home from the hospital.

Your child's appetite might take a long time to return to normal.

Frequently, the skin on their hands and feet will peel. The peeling is a normal part of recovering from Kawasaki disease. Their skin will heal. Some children also show skin sensitivity and skin peeling on other areas of their body. Lotion, skin cream or moisturizers may help as the peeling heals.

Is my child contagious?

No, Kawasaki disease cannot be spread from person to person.

When can my child return to typical activities and school?

Older children can return to school within a few days after going home from the hospital. They should avoid strenuous exercise for at least 2 to 4 weeks, unless otherwise advised by your child's heart doctor.

Can I give my child ibuprofen pain medicine?

Do not give your child ibuprofen (Advil or Motrin) while they are taking aspirin for Kawasaki disease. It can block the aspirin from working.

For low-grade fever or pain, you can give your child acetaminophen (Tylenol). Use this medicine only if recommended by your child's healthcare provider.

Check with your child's healthcare provider first before giving any type of medicine to your child.

Can my child get immunizations or vaccines?

Your child should not have any live-virus immunizations for 11 months after having IVIG (intravenous immunoglobulin). Immunizations with live virus, such as chickenpox (Varicella) and MMR (measles, mumps and rubella) vaccines, can be less effective if given after IVIG.

If your child had the immunization before IVIG or after the 11-month period, they will be effective.

You should talk with your child's primary care provider about the timing of the immunizations.

Research

Doctors at Seattle Children's Hospital are doing research to better diagnose and treat Kawasaki disease. They may contact you regarding this research. Participation in research is voluntary. Your child will receive the same quality care whether you participate or not.

For more information, visit:

seattlechildrens.org/research/integrative-brain-research/our-labs/portman-research-group/kawasaki-disease-program

What follow-up does my child need?

After treatment for Kawasaki disease in the hospital, children are usually seen in the Kawasaki Disease clinic. The Kawasaki Disease Clinic is staffed by heart doctors that specialize in children (pediatric cardiologists) who are dedicated to the diagnosis, treatment, research, and care of patients with Kawasaki disease.

Most children are seen in clinic:

- 2 to 3 weeks after going home
- 6 to 8 weeks after going home
- At 1 year
- Then every 5 years

Some children need to be followed more closely. Your child's heart doctor will determine a schedule based on your child's needs. Your child must be followed carefully for 6 to 8 weeks after leaving the hospital.

It is very important to keep the follow-up appointments with your child's primary doctor and with the heart doctor in the Kawasaki Disease Clinic.

Most children do well after the swelling from the beginning of their illness goes away. However, some children develop heart problems (coronary artery abnormalities or aneurysms), and these children may need more clinic visits or additional tests, such as exercise stress tests. The Kawasaki Disease Clinic within the Heart Center at Seattle Children's Hospital will monitor and treat your child for potential heart problems.

During visits to the Kawasaki Disease clinic, the heart doctor will examine your child, review their medical history, and order tests to create their plan of care. Your child may need some of the following tests:

Echocardiogram

This test, also called an echo test, is an ultrasound of the heart. It is used to show if there is swelling and inflammation in the coronary arteries, which supply blood to the heart. The swelling can cause arteries to enlarge and sometimes form a sac, called an aneurysm.

Your child had an echocardiogram when they were diagnosed with Kawasaki disease in the hospital. Their first test gives baseline information about your child's heart function. Even if your child's first echocardiogram was normal, swelling can last for several weeks, and coronary artery changes can happen during this time. Depending on the age of your child and if they had heart changes in the hospital, the heart doctor may order more frequent echocardiograms.

Electrocardiogram

This test, also called an EKG or ECG, measures the electrical activity of the heart. It shows if the muscle of the heart was injured from Kawasaki disease. Your child will need this test at each clinic visit.

Blood tests

Blood tests are usually needed at the first clinic visit. They can show if the swelling is going away as expected.

To help prepare for blood tests, you can read a book with your child called “What to Expect at Your Blood Draw at Seattle Children’s Lab”

seattlechildrens.org/patients-families/clinic-visit/preparing-your-child

When should I call the doctor?

Call your child’s heart doctor if your child has a fever within the first 3 weeks after they go home from the hospital. Take your child’s temperature if they feel warm and alert the heart doctor if it goes above 100.5°F (38°C). For low-grade fever, you can give acetaminophen (Tylenol). Do not give ibuprofen.