What is Kawasaki disease?

Kawasaki disease is an uncommon illness. It usually affects children under the age of five but older children can be affected. When Kawasaki disease is diagnosed, almost all children will have already had 5 days of fever AND almost all the symptoms listed below:

- the white part of the eye is red or bloodshot
- red lips, mouth or tongue
- puffy/red hands and feet
- a rash
- swollen gland(s) in the neck

What causes Kawasaki disease?

The cause of Kawasaki disease is not currently known and there is no specific test that can be done to diagnose it. It is not known why some children get the disease and others don’t, however, we do know that Kawasaki disease is not a contagious illness (does not spread from child to child). It is extremely uncommon for two children in the same family to get Kawasaki disease.

What is happening in the body when a child has Kawasaki disease?

Kawasaki disease causes swelling of the blood vessels of the body, specifically the blood vessels that are called arteries. The coronary arteries are the blood vessels most commonly affected in Kawasaki disease. The coronary arteries are important in how the heart works.

How does Kawasaki disease affect the heart?

The heart is responsible for pumping blood and oxygen to the body. The heart itself needs blood and oxygen in order to work well. The coronary arteries are the blood vessels that supply the heart with blood and oxygen. About 1 out of every 5 children with Kawasaki disease, if not treated with medicine, will develop some damage to the coronary arteries. In most children this damage is minor and does not last long. In some children, however, this damage can affect the heart into adulthood.

How do we prevent damage to the coronary arteries?

Children diagnosed with Kawasaki disease are admitted to hospital for treatment. The treatment is aimed at preventing damage to the coronary arteries. The medicines we use are called intravenous immunoglobulin (IVIG) and aspirin. IVIG contains antibodies from donated blood. It is given through an intravenous (IV) needle in your vein. Aspirin is initially given by mouth 4 times a day. After a child is treated, the fever usually goes away for good, but rarely a child will need a 2nd treatment with IVIG or other medicines.

How do we know if the coronary arteries are affected?

Every child with Kawasaki disease has a test done called an echocardiogram. This is an ultrasound of the heart that allows us to see if there are any changes in the coronary arteries (the coronary arteries may look widened or swollen).

What type of doctors look after children with Kawasaki disease?

Kawasaki disease is often diagnosed by a pediatrician, an emergency doctor, or a family doctor. Two types of specialists are also involved in the care of children with Kawasaki Disease: pediatric rheumatologists and pediatric cardiologists. The pediatric rheumatologist may help to diagnose Kawasaki Disease and help with treatment decisions while your child is in the hospital. The pediatric cardiologist is the heart specialist that will look at the echocardiogram and see your child after discharge from hospital.

What happens after discharge from hospital?

Most children go home within a few days. Usually the only medicine to keep taking at home is aspirin. The pediatric cardiologist sees all patients with Kawasaki disease for another echocardiogram test about 6 weeks and one year after discharge. Most children with Kawasaki disease recover completely. In a small number of children the pediatric cardiologist may want to do further heart testing or prescribe other medicines.

Is my child more likely to have heart disease in the future?

At the present time we do not know whether children with Kawasaki disease and normal echocardiograms are more likely to develop heart problems when they are adults. In all children we recommend a healthy lifestyle, but it may be even more important in children who have had Kawasaki disease. This includes healthy food choices, participation in activities and exercise that your child enjoys, and avoiding known risk factors for heart disease such as smoking. Please ask your family doctor or pediatrician for information regarding healthy active living for children and families. The Canadian Pediatric Society website (www.cps.ca) also has useful information and links.

A few more things you should know

After a child receives IVIG it is recommended that any scheduled immunizations are delayed. It is important to know that there is no harm in getting a vaccine, however, the worry is that the vaccine may not work well. We recommend waiting at least 9 months for the usual vaccinations after your child has been treated for Kawasaki disease (the flu vaccine is ok however).

It is important that children taking aspirin avoid getting chicken pox. This is because aspirin and chicken pox has been associated with an illness called Reye’s Syndrome. We encourage families to let teachers in the school know about this so that they will notify you if there is chicken pox in the classroom. Please let your doctor know if your child is in contact with chicken pox or develops chicken pox while on aspirin.