

Kawasaki Disease

Kawasaki disease (KD), also known as Kawasaki syndrome, lymph node syndrome and mucocutaneous lymph node syndrome, is an autoimmune disease in which the medium-sized blood vessels throughout the body become inflamed. It is largely seen in children under five years of age, and is particularly prevalent in Asians. It affects many organ systems, mainly those including the blood vessels, skin, mucous membranes and lymph nodes. A rare and serious effect of Kawasaki disease includes coronary artery aneurysms that can be fatal in untreated children. Without treatment, mortality may approach 1%, usually within six weeks of onset. With treatment, the mortality rate is less than 0.01% in the U.S.



PLAY PICMONIC

Pathophysiology

Prevalent in Asian Children

Asian child

Kawasaki Disease is commonly associated with Asian children.

Necrotizing Vasculitis

Necrosis-crow killing vessels

This is a vasculitis, or inflammation of blood vessels, that results in cell death.

Signs and Symptoms

Fever

Fever-beaver

This disease often presents with persistent fever for more than five days.

Strawberry-Red Tongue and Mucosa

Strawberry Red Tongue

This is a characterization of the tongue. Its texture looks like a strawberry and its red color also points to that description.

Lymphadenopathy

Lymph-lime-add (+)

There is often swelling of the cervical lymph nodes, which can present as neck pain or fullness of the neck.

Desquamative Skin Rash

Colorful Skin Rash

This is skin peeling off the hands and body. The hands and body look waxy and often red as the skin peels off.

Erythema and Edema of the Hands and Feet

Edamame on Red Hands and Feet

Patients with this disease often present with swollen hands and feet that are painful and red.

Conjunctivitis

Convict-eye-on-fire

Conjunctivitis is commonly a component of Kawasaki Disease.



Coronary Aneurysm

Coronary-vessel Balloon

These are irregularities of the heart's blood supply. This can cause acute MI in young children. It surpassed rheumatic heart disease as the most common acquired heart disease in children.

Treatment

Intravenous Immunoglobulin (IVIG)

Ivy-gold-goblin

IVIG is part of the treatment for Kawasaki Disease, and consists of giving patients immunoglobulins to neutralize the self immunoglobulins that are attacking the blood vessels and causing the vasculitis.

Aspirin

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This is one of the few occasions when aspirin in a child is allowed. High-dose aspirin is given to prevent coronary thrombus. Usually it is not given to children due to Reye's syndrome.