

Understanding Kawasaki Disease and Long-Term Management



What Is Kawasaki Disease?

Kawasaki disease is an acute inflammatory disease that mainly affects young children, usually under 5 years of age. It causes inflammation of medium-sized blood vessels throughout the body, especially the **coronary arteries** that supply blood to the heart.

Common Signs and Symptoms

Fever for 5 or more days (required)



Red eyes without discharge (conjunctivitis)



Red, cracked lips



Strawberry tongue



Redness of mouth and throat



Rash on the body



Swollen hands and feet



Peeling skin around fingertips and toes (later stage)



Enlarged lymph node in the neck (usually one side)

Effect of Treatment

Without treatment

Coronary aneurysms occur in **20-25%** of patients



With prompt treatment

Risk decreases to **3-5%** of patients



Why Is It Important?

Kawasaki disease can cause inflammation and damage to the coronary arteries, which may lead to:

- Coronary artery dilation or aneurysm
- Blood clots
- Heart attack (rare in childhood)
- Heart muscle inflammation (myocarditis)
- Heart valve leakage
- Heart rhythm abnormalities

Heart Evaluation (Echocardiogram)



- Evaluates coronary artery size
- Heart function
- Heart valves
- Pericardial effusion

Typical schedule:

- ✓ At diagnosis
- ✓ 1-2 weeks after diagnosis
- ✓ 4-6 weeks after diagnosis
- ✓ Additional follow-up if abnormalities are present

How Is It Diagnosed?

There is no single test. Diagnosis is based on:



Clinical symptoms and physical examination



Blood tests showing inflammation (elevated ESR and CRP)



Echocardiogram to evaluate the coronary arteries



Other tests as needed to rule out other conditions

Treatment



Intravenous Immunoglobulin (IVIG)

- Single high-dose infusion
- Most effective within the first 10 days of illness
- Significantly reduces the risk of coronary artery complications



Aspirin

- High-dose during the acute phase (anti-inflammatory)
- Then low-dose for antiplatelet effect
- Duration depends on coronary artery involvement



Additional Therapies (Selected Patients)

- Corticosteroids, infliximab, cyclosporine or other immunomodulatory therapies
- Used in IVIG-resistant cases

Long-Term Management Based on Coronary Artery Involvement

Risk Level 1

No Coronary Involvement



- Cardiology follow-up for 1 year
- Aspirin discontinued after recovery
- No activity restrictions
- Excellent long-term outlook

Risk Level 2

Temporary Dilation (Resolves)



- Periodic cardiology evaluation
- Usually no activity restrictions
- Very good outlook

Risk Level 3

Small Persistent Aneurysm



- Lifelong cardiology care
- Regular imaging and stress testing
- Long-term low-dose aspirin
- Individualized activity recommendations

Risk Level 4

Medium Aneurysm



- Lifelong specialized care
- Imaging and stress testing
- Aspirin and possibly additional blood thinners
- Individualized activity recommendations

Risk Level 5

Large or Giant Aneurysm



- Lifelong specialized care
- Higher risk of blood clots and heart attack
- Frequent imaging and stress testing
- Aspirin and anticoagulation may be required
- High-intensity competitive sports may be restricted

Exercise and Sports Participation



- No coronary abnormalities: No restrictions
- Temporary dilation: Usually unrestricted
- Persistent aneurysms: Individualized plan after stress testing
- Giant aneurysms: High-intensity competitive sports may be restricted

Heart-Healthy Lifestyle



- Healthy diet (fruits, vegetables, whole grains)
- Regular physical activity
- Maintain healthy weight, blood pressure and cholesterol
- Avoid smoking, vaping and recreational drugs

Key Take-Home Messages



- ✓ Early recognition and treatment are critical.
- ✓ IVIG dramatically reduces complications.
- ✓ Echocardiogram is essential for follow-up.
- ✓ Most children recover completely.
- ✓ Those with persistent aneurysms require lifelong specialized cardiac care.



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