



Kawasaki Disease

Kawasaki disease (KD) is a multi-organ, systemic vasculitis of small and medium-sized arteries. It is a leading cause of acquired childhood heart disease in developed countries. Incidence is highest in children less than 5 years of age, but KD can occur throughout childhood. KD is typically an acute, self-limited, febrile illness. However, if left untreated, coronary artery (CA) dilation and coronary artery aneurysms (CAA) occur in up to 25% of patients. The pathogenesis of KD remains unknown.

DIAGNOSIS

Symptoms of KD may not occur concurrently; diagnostic criteria are met if clinical features occur at any point during the course of illness.

*ALL patients with suspected KD require an echocardiogram (ECHO), however diagnosis and treatment should not be delayed if ECHO is not immediately available.

Complete KD diagnostic criteria consist of fever ≥ 5 days and at LEAST 4 of:

- Bilateral, non-purulent conjunctivitis
- Oral changes (cracked red lips, strawberry tongue, oropharyngeal erythema)
- Extremity changes (acute: hand/foot swelling and/or palmar/plantar erythema. subacute: peelings hands and feet)
- Polymorphous (variable appearance), non-vesicular, non-pruritic rash
- Cervical lymphadenopathy ≥ 1.5 cm (usually unilateral)

In the presence of 4 or more principal clinical features, the diagnosis can be made with 4 days of fever.

Incomplete KD is suspected when an older child presents with fever ≥ 5 days OR in infants with ≥ 7 days of unexplained fever AND:

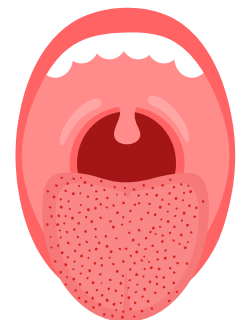
- At least 2-3 of the above criteria for complete KD
- ESR ≥ 40 mm/h or CRP ≥ 30 mg/L (or both)

If the above criteria are met, they must ALSO have either:

- Positive echocardiogram findings (as per AHA KD Guidelines)

OR 3 of the following:

- Anemia (Hgb below lower limit for age)
- Platelets $\geq 450,000$ after 7 days of fever
- Albumin ≤ 30 mg/L
- Elevated ALT
- WBC $\geq 15,000$ mm³
- Urine WBCs ≥ 10 /hpf



Identifying an infection does not rule out Kawasaki Disease. KD and infection may be concomitant, and both should be treated.



Kawasaki Disease

TREATMENT

- Diagnosis and treatment within 10 days of fever onset is strongly associated with a lower risk of CA dilation or aneurisms
- Once diagnosed, the patient should be admitted for treatment
- Standard treatment consists of IVIG and ASA for all patients
- High-risk patients (less than 6 months of age or evidence of coronary artery dilatation on echocardiogram) may benefit from intensification of therapy with IVIG plus adjunctive anti-inflammatory therapy to reduce the risk of CAA (consult Pediatric Rheumatology and Cardiology)

IVIG

- IVIG rapidly reduces inflammation (fever should resolve within 24-36 hours)
- 2 g/kg/dose is infused at incrementing rates over 8-12 hours (depending on the brand)
- Infusions are generally well-tolerated. Adverse reactions include headache (treat with acetaminophen), fever, infusion reactions and hemolytic anemia
- Patients with persistent fever ≥ 36 hours after the completion of the initial infusion are defined as IVIG resistant. May require a second dose of IVIG or corticosteroids (consult Pediatric Rheumatology)

ACETYLSALICYLIC ACID (ASA)

- ASA is used to prevent coronary artery thrombus formation
- Low-dose ASA (3-5 mg/kg/dose PO daily; MAX: 81 mg) is started along with IVIG
- Alternatively, a moderate dose of 7.5-12.5 mg/kg/dose PO q6h can be considered while the patient is febrile, with transition to low-dose ASA when afebrile
- There is mounting evidence that moderate or high (30-100 mg/kg/day) doses of ASA in the acute phase are unlikely to improve outcomes. See QR code for the AHA on the next page for more information
- NSAIDs can inhibit the anti-platelet effects of ASA and should be avoided
- DO NOT give ASA if platelets $< 80 \times 10^9/L$
- If ASA is contraindicated due to allergy or infection with influenza or varicella, clopidogrel may be used as an alternative

DISCHARGE & FOLLOW UP

- Discharge if afebrile and hemodynamically stable 36-48 hours post-IVIG
- Continue low-dose daily ASA until advised to stop (usually after follow-up ECHO)
- Repeat echocardiogram at 6 weeks and follow-up with Rheumatology and Cardiology
- Return to hospital for reassessment if fever or symptoms reoccur
- Inactivated influenza vaccine is recommended to reduce the risk of Reye's with ASA
- Defer live vaccines for 11 months (IVIG reduces vaccine efficacy)

American Heart Association



Update on Diagnosis and Management of Kawasaki Disease

MSSU Webinar



March 11th 1200-1300: Building a Maritime Pediatric Learning Health System with Youth, Families, Clinicians, and Community Partners

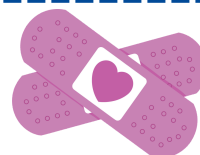
Pediatric Grand Rounds

March 4th 0900-1000: Where Culture Meets Care: What We Know, What We Don't & Why It Matters

Meeting ID: 817 1067 5567

Passcode: 443679

Comfort Corner



Health Canada's [Action Plan for Pain in Canada](#) outlines a national strategy to address chronic pain and builds on system improvement efforts in federal, provincial, and regional contexts. Created by the [Canadian Pain Task Force](#), it aims to elevate pain as a public health priority, improve equitable access to evidence-informed and person-centered care, enhance education for both health professionals and the public to reduce stigma, strengthen research and data systems to support innovation and monitoring, and focuses on populations disproportionately impacted, all with the overarching aim of ensuring pain is better understood, prevented, and effectively treated across the country. [Listen to the Action on Pain](#) podcast for a look at how leaders across Canada are implementing the Action Plan for Pain. The podcast is hosted by persons with lived experience who highlight progress, challenges, and real stories to raise awareness and support meaningful improvements in pain care.



Action on Pain Podcast
Real stories. Expert voices.
Action for change.

Listen on your podcast platform:
[Spotify](#)
[Apple Podcasts](#)
[Amazon Music](#)



References

- AHA (2024). *Update on Diagnosis and Management of Kawasaki Disease: A Scientific Statement From the American Heart Association*. <https://www.ahajournals.org/doi/10.1161/CIR.0000000000001295>
- CPS (2026). *Kawasaki disease: Practical guidance on diagnosis and management*. <https://cps.ca/en/documents/position/kawasaki-disease>

Written by: Madi Lewis RN, CpedN(C). Clinical Practice Leader - Pediatrics. Maritime Child Health
Reviewed by: Jaime McDonald, PharmD - Clinical Pharmacy Specialist (Pediatrics) - Maritime Child Health
Dr. Joanna Holland, MSc, MD, FRCPC. Pediatrician - IWK Pediatric Medical Unit

Disclaimer: The information in the Pediatric Pulse is for reference and educational purposes only. The content is created using the most up to date information and evidence at the time of preparation. It is not a substitute for clinical judgement, knowledge or expertise medical advice. Maritime Child Health and the IWK is not responsible or liable for any claim, loss, or damage resulting from the use of this information.