



Kawasaki disease is an **acute inflammatory vasculitis** of medium sized arteries.

## CLINICAL FEATURES OF TYPICAL KAWASAKI DISEASE

Diagnostic criteria: **fever for  $\geq 5$  days** with  $\geq 4$  out of 5 of the following features:

### **C**onjunctivitis

(bilateral, bulbar, non-purulent)



### **R**ash

(any rash except vesicular)



### **E**xtrемities

Acute: palmar/plantar erythema and/or edema

Subacute: periungual desquamation



### **A**denopathy

(cervical,  $\geq 1.5$  cm, unilateral)

### **M**ucosal changes

(strawberry tongue, cracked and erythematous lips, etc.)



**Incomplete (atypical) Kawasaki disease:** fever for  $\geq 5$  days with  $\geq 2$  of the above criteria. Assess for supplemental laboratory criteria.

## OTHER POTENTIAL CLINICAL FINDINGS

**Cardiovascular:** coronary artery aneurysms,  $\downarrow$  left ventricular function, pericarditis, myocarditis, mitral regurgitation, shock

**Gastrointestinal:** abdominal pain, diarrhea, nausea, vomiting

**Neurological:** irritability, facial nerve palsy, hearing loss

**MSK:** arthritis, arthralgia (pleocytosis of synovial fluid)



Memory aid:

**"WARM CREAM"**



## KD PHASES

- Acute: 1-2 weeks
- Subacute: 3-4 weeks
- Convalescent: 6-8 weeks

## INVESTIGATIONS

- Basic labs:** CBC+diff, lytes, Cr, CRP, ESR, ALT, albumin, urinalysis
- Transthoracic ECHO** (rule out coronary artery aneurysms) at diagnosis and follow-up as indicated
- ECG** (ST changes, pericarditis, myocarditis, etc.)

- CXR** (rule out pulmonary pathology, rule out cardiomegaly)
- Blood culture**, if clinically indicated
- Other **bacterial** and **viral testing** as clinically indicated
- Multisystem inflammatory syndrome in children (MIS-C):** above tests + COVID-19 PCR and serology, CK, ferritin, LDH, fibrinogen, D-dimer, PTT, INR, troponin, NT-proBNP

## LAB FINDINGS

- Anemia
- $\uparrow$  platelets
- $\uparrow$  WBC
- Hyponatremia
- $\uparrow$  CRP
- $\uparrow$  ESR
- $\uparrow$  liver enzymes
- $\downarrow$  albumin
- Sterile pyuria

## TREATMENT

- Intravenous immunoglobulin (IVIG):** 2g/kg x 1 dose, reassess after 24 hours, then consider a second dose.
  - ✓ If available, consider sending COVID-19 serology prior to IVIG administration.
- ASA as per institutional guidelines** until normal follow-up ECHO.

## COMPLICATIONS

### Coronary artery aneurysms

- Untreated KD: 20-25%
- Treated KD: 1-3 %



Published March 2021

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