ATYPICAL PRESENTATION OF KAWASAKI DISEASE

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12 year old boy :

- Fever 6 days- high grade, intermittent
- Day 3 - erythematous maculopapular rashes over face and trunk, with itching.
- Nausea & non-bilious vomiting- 3 episodes.
- No h/o bleeding manifestations/altered sensorium/abdominal pain
ON EXAMINATION

* Toxic, alert, conscious
* Febrile(101.6°F), PR-104/min, RR-30/min, BP-110/70mmHg, Pulses +++/++
* Icterus +
* Conjunctival congestion (B/L) +
* Submandibular lymphadenopathy 1.5 x1cm (B/L)+
* Throat- congested,
* Tonsils- enlarged, congested
* Strawberry red tongue +, glossitis +
*Erythematous maculopapular rashes - body +
* Pruritic marks +
* Tender hepatosplenomegaly +
* Other systems - NAD

Treatment: IVF, oral Paracetamol, IV Emeset
**ABNORMAL**

* TLC - 13,800  P77 L14 E9  
* Platelet - 4.36 lakhs  
* CRP + (20)  
* Total bilirubin - 4.7, direct - 4.2, indirect - 0.5  
* SGOT - 53, SGPT - 109, ALP - 419  
* ESR - 44,80  

**NORMAL**

* Normal serum proteins, PT, APTT  
* Normal serum electrolytes  
* Normal Serum urea, creatinine  
* MPQBC - ve,  
* Dengue - ve  
* Urine analysis  
* Chest Xray
WORKING DIAGNOSIS

LEPTOSPIROSIS / EBV INFECTION
Inj. Crystalline pencillin - 10 lakh IU iv QID,
Inj. Taxim - 1.25g iv TDS were started
Day 2-4

* Fever spikes continued.
* Rashes & icterus persisting
* Exfoliation of skin over face, neck and trunk+
* Conjunctival redness persisting
* Leptospira serology - ve
* Scrub Typhus - Non reactive
* USG - mild hepatomegaly +, IHBR normal
* 1st day blood and urine culture - ve
* EBV serology negative

*Treatment continued...
# Kawasaki disease - suspected

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<th>Symptoms</th>
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<tr>
<td>* Persisting fever</td>
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<td>* Negative cultures</td>
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<td>* Raised acute phase reactants</td>
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<tr>
<td>* Rash</td>
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<td>* Strawberry red tongue</td>
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<th>Laboratory Findings</th>
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<tr>
<td>* B/L Submandibular lymphadenopathy</td>
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<td>* Exfoliation of skin of face, chest and abdomen</td>
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<td>* Icterus</td>
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* Mild ectasia of RCA, LAD
* Mild irregularity of RCA, LMCA, LAD
* Inj. Pencillin and Taxim were stopped.

* Intravenous Immunoglobulin (IVIg) - 1g/kg/24 hours for two consecutive days

* Tab. Aspirin - 5 mg/kg/day and given in two divided doses.
* Defervescence of fever.
* Rashes subsided.
* No icterus

* Total count-16100
* Platelets -6.06 lakhs
* Total bilirubin-1.1, direct-0.8, indirect -0.3
* SGOT-26, SGPT-64
* CRP +
* ESR -raised (53,105)
* HbsAg - ve
* Anti HAV IgM - ve

Child was discharged with Aspirin 5mg/kg/day
Child was discharged with Aspirin 5mg/kg/day
*ICTERUS*

*RASH WITH EXFOLIATION OF FACE, CHEST AND ABDOMEN*

A few case studies and reports from Western countries. No Indian literature supporting this.
“ACUTE FEBRILE CHOLESTATIC JAUNDICE IN CHILDREN : KEEP IN MIND KAWASAKI DISEASE”

Taddio A, Pellegrin MC, Centenari C, Filipeschi IP, Ventura A, Maggiore G


**High index of suspicion of KD should be maintained in patients presenting with febrile cholestatic jaundice.**
Acute cholestasis and liver involvement occur occasionally as minor manifestation of KD. KD should be considered in differential diagnosis in children with cholestasis, abdominal pain and fever of unknown etiology.
A 10-year-old boy had atypical presentation of Kawasaki disease with hepatomegaly and jaundice, and persistent fever. No conjunctivitis until the 8th day of fever, and periungual desquamation and strawberry tongue until the 13th day of fever when Kawasaki disease was diagnosed. Echocardiography revealed multiple coronary artery aneurysms.

A persistent fever with jaundice should evoke the differential diagnosis of Kawasaki disease.
“ATYPICAL KAWASAKI DISEASE AND GASTROINTESTINAL MANIFESTATIONS”

Paediatr Child Health. 2007 March; 12(3): 235-7

Reported cases of atypical KD presenting with icterus, abdominal pain, having raised bilirubin, liver enzymes and later showing coronary abnormalities in ECHO.
LAB CRITERIA

Serum albumin < 3.0g/dl
Anaemia for age
Elevation of alanine aminotransferase
Platelets after 7 days > 4,50000/mm³
WBC >= 15000/mm³
Urine WBC >= 10/HPF
(B) ECHOCARDIOGRAPHIC CRITERIA

Z score of LAD/RCA \( \geq 2.5 \)

Coronary arteries meet Japanese Ministry of Healthcare criteria for aneurysm

Internal lumen diameter:

- \( > 3 \text{mm in children} < 5 \text{yrs old} \), or
- \( > 4 \text{mm in children} > 5 \text{yrs old} \)

If a segment measures \( > 1.5 \) times that of adjacent segment

Clearly irregular lumen
6 suggestive features (if >3 positive)

1) Perivascular brightness of coronary arteries
2) Lack of tapering of coronary arteries
   Decreased LV function
   Mitral regurgitation
   Pericardial effusion
   Z score in LAD or RCA of 2 to 2.5
*Detecting coronary abnormality in ECHO is crucial in detecting incomplete Kawasaki disease.*
Think of Kawasaki Disease also- in children with **fever, icterus, high Acute Phase Reactants and negative cultures**
SPECIAL THANKS TO

DR. N.C. GOWRISHANKAR
(Consultant Paediatric Pulmonologist and bronchoscopist)

DR. S. THANCAVELU
(HOD, Paediatrics Dept Mehta Childrens Hospital)
THANK YOU