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Pediatrics

INCOMPLETE KAWASAKI DISEASE IN INFANCY – A Case Report

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ABSTRACT Kawasaki Disease (KD) is an acute medium vessel vasculitis of childhood. In infancy KD is characterised by incomplete and atypical forms with limited data of case reports in infants less than 6 months of age. Here we report a rare case of incomplete KD in 5 month old boy baby.

KEYWORDS : Kawasaki disease, Intravenous immunoglobulin, Coronary artery dilatation, AHA 2017 guidelines.

INTRODUCTION

Kawasaki Disease (KD) is an acute medium vessel vasculitis primarily affecting young children. In infancy KD is characterised by incomplete and atypical forms with limited data of case reports in infants less than 6 months of age. Studies done in the past showed that prevalence of incomplete presentation was relatively higher in the younger infants [1,2]. Furthermore, patients presenting with incomplete kawasaki disease were found to be younger than those presenting with complete forms as shown by sudo et al [3].

Pediatricians occasionally see these incomplete forms as febrile children who do not meet the diagnostic criteria but have a number of symptoms that are similar to Kawasaki disease, thereby making the diagnosis of incomplete Kawasaki disease very challenging[4,5]. The incidence of coronary artery lesions (CAL) in untreated cases is 15-25 % where as in IVIG treated cases is only 5% [6,7]. Hence early diagnosis and prompt treatment is crucial in avoiding complications like CAL.

CASE REPORT

5 months old male child came with complaints of fever for 9 days, vomiting for 1week, loose stools for 2 days treated outside as UTI with multiple antibiotics. Came to our hospital on day 10 of illness with persisting symptoms. Developmental and birth history were normal. Child is on exclusive breast feeding.

On Examination

Child was febrile, toxic, irritable with signs of some dehydration. Pallor present, BCG scar induration present. No conjunctival injection, peeling of skin, strawberry tongue, lymphadenopathy. Peripheries warm, pulses well felt.

Temperature: 103 degree F, HR : 160/min, RR : 40/min, CRT < 2sec, SpO2 : 98% in room air.

Abdominal Examination: soft, mild hepatomegaly present.
CVS: S1 S2 heard, no murmur.
RS: NVBS heard, no added sounds.
CNS: no focal neurological deficit.

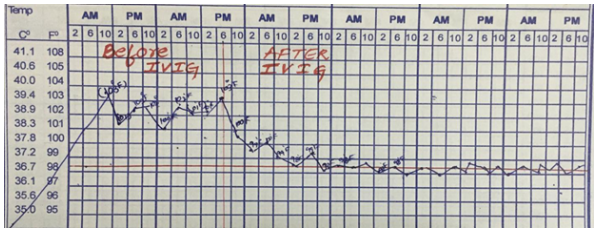
INVESTIGATIONS

Hb: 8 gm/dl, TLC: 16000/cumm, PLT: 4.5 lakhs/cumm, ESR: 60 mm in 1hr, CRP: 6 mg/dl
Serum Albumin: 2.8 g/dl, Total Proteins: 5.2 g/dl, ALP : 60 U/L.
Urea: 12 mg/dl, Creatinine: 0.3 mg/dl, SGOT: 19 U/L, SGPT : 80 U/L
Urine routine: 20-25 pus cells/hpf, Urine culture: no growth after 48 hrs of incubation.

USG: normal study
ECHO: Investigations reports were in favour of incomplete KD so we proceeded with ECHO which showed right coronary artery dilatation with Z score of +4.7, hence a diagnosis of incomplete Kawasaki was made based on the ECHO criteria (Z scores in LAD/RCA of 2 to 2.5).

Treatment Given

IV IG given at 2gm/kg



DISCUSSION

Diagnosis of Incomplete Kawasaki disease (IKD) is very challenging in infancy. According to AHA 2017 guidelines IKD donot have sufficent principal clinical findings [8]. Many recent studies have identified clinical and/or laboratory markers that can aid in the early detection of incomplete forms of Kawasaki disease. IKD has to be suspected in children with fever lasting for 5 or more days and with two or three of the classical findings like conjunctivitis, cervical lymphadenopathy >1.5cm, erythematous rash, mucositis, skin peeling in extremities [9]. However in infants less than 6 months of age IKD is suspected when there is unexplained fever for 7 or more days with laboratory evidence suggestive of inflammation even if no criteria is met. Hence in these young infants echocardiography should be considered for prompt diagnosis and initiation of treatment thereby avoiding complications like CAL.

CONCLUSION

Our case report shows that incomplete form of KD is also seen in infants less than 6 months. Delay in its diagnosis and treatment can have catastrophic events like Coronary artery aneurysm, Thrombosis and Myocardial Infarction. Young adults presenting with coronary artery disease/sudden death are presumed to be a childhood kawasaki. Hence pediatrician need to have a high index of suspicion of KD when dealing with infants with unexplained fever for more than 7 days as they hold a higher risk of developing coronary artery lesions.

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