Recurrent Kawasaki Disease

Dear Editor,

Herein, we are reporting first case of recurrent Kawasaki disease in a UAE tertiary Hospital; the patient experienced a reappearance of inflammatory symptoms of Kawasaki after seven years of index episode.

Kawasaki disease (KD) is a disease of unknown etiology. It is a vasculitic disease, which affects coronary arteries especially small, and medium size ones.[1] Although, the prognosis is good but coronary artery aneurysm is a very serious complication if not treated early. Young children are most commonly affected but recurrence is rare.

A 9-year-old Indian boy admitted with 10-days history of fever, sore tongue, ankle pain, neck swelling, skin rash and lethargy, he responded poorly to antibiotic. His past history was notable only for an episode of KD at 2-year of age, treated with Intravenous Immunoglobulin (IVIG) and aspirin with normal Echocardiography.

Upon current admission examination, he was febrile (40°C), lethargic, with bilateral non-exudative conjunctival injection (Figure 1), red-swollen lips and tongue, enlarged left-sided cervical lymph nodes, maculopapular skin rash on the trunk, extremities, and mildly red-swollen hands. Otherwise, examination was unremarkable.

Laboratory investigation revealed marked elevation of inflammatory markers CRP: >120 mg/L, ESR: 100 mm/hr. ASO titer: 800 IU/ML. Blood culture, Throat Culture and virology study were negative. Complete blood count showed: WBC: 19.1x10^3/uL, HGB: 12.0 g/dL, PLT: 475 x 10^3/uL. Mycoplasma IgG and IgM: Negative. Liver function test showed: Albumin: 3.5 g/dL alkaline phosphatase: 314 U/L ALAT (SGPT): 167 U/L, Bilirubin, T: 2.8 mg/dL, TP: 6.9 g/dL, Globulin: 3.4 g/dL. Serum Urea and electrolytes: Normal, Urine routine and culure were normal apart from pyuria WBC 14-16. X-ray Chest: normal. Echocardiography showed no cardiac sequelae.

He was successfully treated with a single dose of 2 g/kg of IVIG, aspirin therapy, with supportive measures.

The child's condition improved, fever subsided within 48 hours. He was discharged 3 days after admission Further follow-up including echocardiography has been uneventful.

The diagnosis of Kawasaki is based on the clinical criteria with no specific diagnostic laboratory test. Recurrence is unusual. Previous studies in the United States and Japan have determined Kawasaki disease to recur in ~2-4% of patients.[2,3] Maddox et al, 2015, in their descriptive epidemiologic studies of recurrent and non-recurrent KD, noted 1.7% of patients <18 years of age were identified as having had recurrent KD. Among the US Asian/Pacific Islander Kawasaki disease patients, 3.5% had recurrent KD, which was similar to the percentage identified among KD patients (3.5%) in the Japanese survey.[4]

It was reported that incidence of recurrence within 2 years from the first episode is higher than after 2 years.[2] However, it has been reported that KD can occur many decades after the initial presentation.[5] In this unique case-study, we are presenting an Indian child with recurrent Kawasaki disease after 7 years from the first episode. Furthermore, there was no cardiac sequelae in the two episodes.

Kawasaki disease diagnosis is challenging, as it is mostly clinical. Pediatrician should be alert for its clinical criteria and including Kawasaki disease in the differential diagnosis of fever unresponsive to appropriate therapy especially if there is a previous history of the disease.

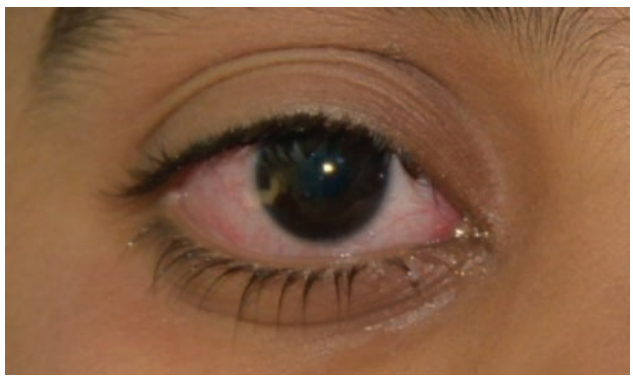

Figure 1 Non-exudative conjunctival injection.

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