

Picture Story

Coronary artery dilatation on the fifth day of fever in a case of Kawasaki disease

Ajith Amarasinghe¹, K Sivakumar², E A N Fonseka³, S Narenthiran⁴

Sri Lanka Journal of Child Health, 2004; **33**: 29

(Key words: coronary artery dilatation. Kawasaki disease)

9A 10 month old boy was brought to Apollo Hospitals, Colombo on 24 January 2003 with a history of high grade fever, poor feeding, skin rash and intermittent drowsiness for 2 days. He had a generalized macular skin rash, drowsiness and tearing from both eyes, which were red. Rest of the examination was normal. A septic screen, including a lumbar puncture, was done. All investigations were normal except for the ESR which was 72 at 2 hours.

His fever continued despite being on intravenous (IV) cefotaxime and penicillin. On the 4th day of fever (26/01/2003) a red coloured tongue and redness of feet were observed. As he had four criteria for the diagnosis of Kawasaki disease (bilateral non-suppurative conjunctivitis, polymorphous skin rash, red tongue and erythema of palms and soles) he was started on oral aspirin 12.5 mg three times a day and referred for cardiological evaluation.

A 2D Echocardiogram done on the 5th day of fever (27/01/2003) showed significant dilatation of the left main coronary artery to 3.7 mm (Figure 1). The right coronary artery was normal (Figure 2).

As this child needed IV immunoglobulin transfusion and the parents could not afford it he was transferred to Lady Ridgeway Hospital (Teaching) Colombo. A 2D ECHO, done at Lady Ridgeway Hospital, showed the same results. This child was given IV Immunoglobulin 20 g on 28/01/2003 and in two days fever subsided.

He has so far been followed up for the last one year at Lady Ridgeway Hospital and Apollo Hospitals, Colombo. As the coronary artery dilatation is persisting he is on long-term low dose aspirin prophylaxis.

About 15-25% of children who are diagnosed to have Kawasaki disease develop coronary artery dilatation¹.

¹Consultant Paediatrician, Apollo Hospitals, Colombo, ²Consultant Paediatric Cardiologist, Apollo Hospitals, Colombo, ³Consultant Paediatrician, Lady Ridgeway Hospital, Colombo, ⁴Consultant Cardiologist, Lady Ridgeway Hospital, Colombo.



Figure 1 2D ECHO showing dilated left main coronary artery



Figure 2 2D ECHO showing normal right coronary artery

This incidence is reduced to 3-4% if IV Immunoglobulin is given¹. Coronary artery dilatation occurs from day 7 to day 21 from the onset of fever¹. We could not find any reported cases of coronary artery dilatation on the fifth day of fever which is the minimum duration of fever to diagnose Kawasaki disease.

Reference

1. 2001- Kawasaki disease opinion statement by American Heart Association

