Long term outcome of Coronary Artery lesions after Kawasaki Disease in Children

Di Filippo S, Lega C, Dureux C, Sassolas F, Gouton M, Bakloul M, Veyrier M, Bozio A
Pediatric Cardiology, Cardiovascular Hospital Louis Pradel, LYON, FRANCE

Abstract

The aims of this study were to describe and assess long-term outcome of cardiac lesions after Kawasaki disease (KD).

Material and Methods: The medical records of 417 patients referred for KD suspicion since 1988 were retrospectively reviewed.

Results: 210 patients met criteria for diagnosis of KD, at the age of 2.7±2.9 years. Time to diagnosis was 7.8±4.7 days. Time to hospitalization was 5.7±4.3 days. Time to first echocardiography was 11.9±7.8 days. Median time to intravenous immunoglobulin administration was 6 days (1 to 29). A total of 53 patients (25.4%) were free from cardiac lesions, 23.8% (52 cases) had coronary artery lesions (CAL). Among CAL, 25 patients (12.5%) had aneurisms, 27 (13.2%) had dilatation, and 27 (13.2%) had hyperechogenic coronary arteries. Among CAL, 40 were <4mm in diameter, 9 were 4 to 5mm, and 3 were >5mm (giant aneurysms). One third localized on one coronary vessel, one third on 2, and one third on all 3 coronary arteries. Echographic pericarditis was found in 31 patients, mitral insufficiency in 30 and atrial fibric in 2. All patients recovered, except 1 who died from cardiac arrest due to reperfusion. Coronary lesions were found in 174 patients (35.8%) and persisted in 35 (64.4%, i.e. 16.7% of all patients). The occurrence of coronary lesions in KD have lessened over time.

Background and Aims

Although Kawasaki Disease (KD) is the most frequent acquired coronary disease in children and may severely impact on long term cardiac outcome, little is known about KD features in France.

Aims of the study:
• Assess the characteristics of KD in France over a long period of time.
• Describe cardiac KD lesions and outcomes.

Material and Methods

From August 1983 to April 2007 / Single-center experience
Retrospective review of records

N = 417 patients with KD suspicion

Results

N = 210 patients with diagnosis of KD
M / F = 125 / 85 = 1.5

Factors associated with CAL

Decreasing incidence = 1997 : 7.2%

Factors associated with CAL regression

Conclusion

The occurrence of coronary lesions in KD have lessened over time. Long-term outcome is favourable despite persistent coronary lesions.