

The Late Sequelae of Coronary Artery in A Grown Up Kawasaki Disease Patient

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Kawasaki disease; coronary artery aneurysm; triple vessel disease; high sensitivity C-reactive protein; atherosclerosis

Dear Editor,

The article by Lim *et al*¹ was an insightful description of the late sequelae of the coronary artery in a patient with prior Kawasaki disease during infancy. Late diagnosis and treatment with intravenous immunoglobulin could have predisposed this patient to develop severe and persistent coronary artery aneurysm(CAA). CAA has typical predilection for ostial-proximal, left main and bifurcation segment of the coronary arteries. CAA more than 6mm in diameter has the tendency to develop coronary stenosis after an average of 15 years². CAA may get bigger and develop stenotic lesions especially at the pre and post-aneurysmal segment. CAA was also prone to develop calcification, thrombus formation and atherosclerotic changes.

Hence, it was not surprising for the patient to remain asymptomatic until 16 years of age. Even though there was no chest pain and the cardiac enzymes were not raised, the exertional dyspnoea during sporting activity could well denote the angina equivalent syndrome which correlated well with the coronary angiogram finding of a stenotic left main and occluded right coronary artery(RCA). 2 years later the left anterior descending coronary artery was occluded. The authors mentioned the occurrence of "natural bypass of the artery" and we assumed that the patient relied precariously on the single remaining and also diseased left circumflex artery with concomitant stricture of the left main and other established collateral supply. Perhaps at this point

in time, the patient should have gone for coronary artery bypass graft(CABG) operation as his coronary artery disease was clearly progressing with the attending higher risk of myocardial infarction and sudden death.

It is interesting to note that Kawasaki disease patients with persistent CAA have higher level of inflammatory markers such as high-sensitivity C-reactive protein and serum amyloid-A, suggesting possible on-going low grade inflammation of the coronary arteries³. Adults with late sequelae of coronary artery disease especially with coronary revascularization done should have their cardiovascular risk factors treated aggressively. Pharmacotherapy strategy should include statin and acetylsalicylate acid for the anti-thrombotic and anti-inflammatory effect. Perhaps, the activity of the disease with coronary involvement could be monitored with inflammatory markers such as high-sensitivity C-reactive protein.

As more paediatric patients afflicted by Kawasaki disease grow up, we need to be aware of the distinct and earlier presentation of cardiovascular events than the normal population cohort.

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