

## Images In Cardiology: Aneurysms Of Coronary Arteries In Kawasaki Disease

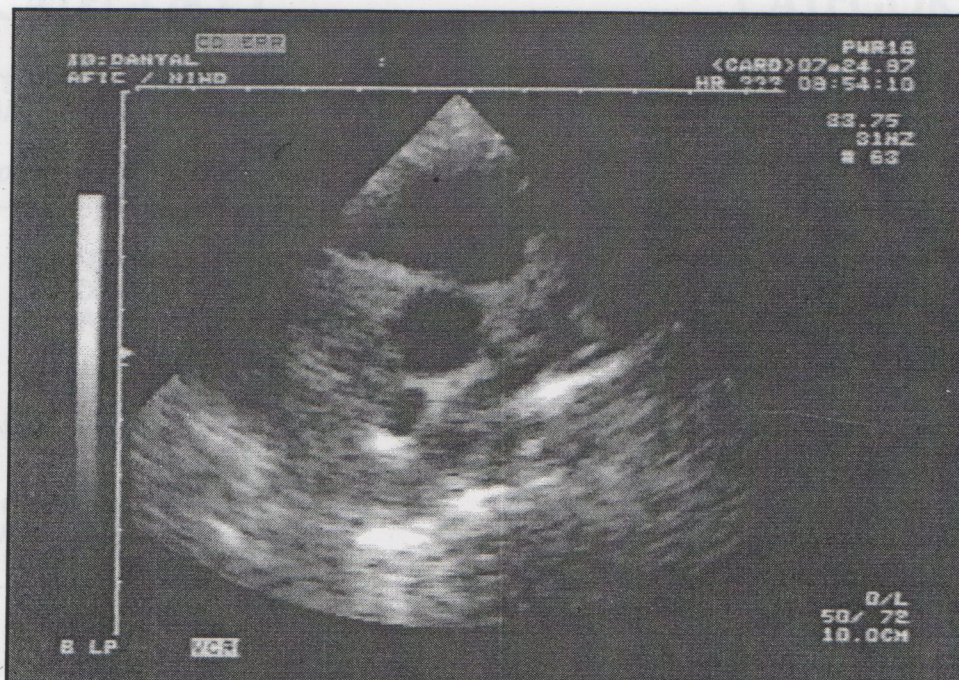
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A four years old boy was referred for Echocardiography on tenth day of illness with the provisional diagnosis of Kawasaki disease. We found the heart to be structurally normal. We commented that the diagnosis of Kawasaki Disease was often clinical in the acute stage and the absence of cardiac involvement did not exclude it. Two weeks later repeat echocardiogram showed big coronary aneurysms, > 3mm in diameter, in the Left Main Stem and Left anterior descending branch of the left coronary artery (picture 1) and a few smaller ones in the Right Coronary Artery.

Kawasaki disease is a febrile erythematous disease that was first identified during epidemics in Japan in

mid sixties and seventies<sup>1</sup>. In about 20% cases there are cardiac complications like pericarditis, myocarditis, valvular heart disease and most importantly coronary aneurysms. Aneurysms may be discovered in acute phase in 15 to 17% of cases only. 50% of these may resolve completely over the next year or so. Another 25% will regress in size and about 15% progress to stenosis or obstruction of the coronary arteries. They may result in chest pain, myocardial ischemia, myocardial infarction and in smaller children sudden death<sup>2</sup>. The single most important prognostic feature of these aneurysms is the size. Giant aneurysms (>8 mm in diameter) account for one fourth of all aneurysms and occur in 5% of all patients with Kawasaki Disease, create maximum risk for eventual coronary

Picture 1



occlusion<sup>3</sup>. These patients may require bypass surgery<sup>5,6</sup>

Aspirin has to be given for longer duration if there are aneurysms.

Dipyridamole may be added if there is greater risk of thrombosis. Some give heparin or coumadin patients with severe coronary findings or with coronary thrombosis.

Intravenous Gamma Globulin is given to reduce risk of aneurysm formation. Steroids may increase risk of aneurysm and hence are not recommended<sup>4</sup>.

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