

Images in Congenital Cardiac Disease

The young man with a stenocardial acute chest pain*

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A 19-YEAR-OLD MAN UNDERWENT CORONAROGRAPHY because of typical signs of acute cardiac syndrome, an electrocardiographic characteristic change for the ST elevation myocardial infarction and Troponin T elevation. The coronarography revealed a huge saccular aneurysm of the left coronary artery (Fig 1) and dilatation of the right coronary artery on the whole run with its closure in the middle (Fig 2). These “aneurysm-like” changes strongly suggest a history of Kawasaki disease. According to the literature, up to 15–20% of patients develop coronary aneurysms

in the course of disease. Approximately half of the changes regress within a few years. Persistent aneurysms become occlusive, which increases the risk of myocardial infarction. Otherwise, the size of the aneurysm is the most important predictional factor. There are a few risk factors of development of these complications in the course of Kawasaki disease: gender (male) and delay of treatment. A consequence of the disease may primarily be chest pain (60%) followed by sudden death and arrhythmia. Ischaemic cardiac disease is documented to develop in only 2.4% of all patients with Kawasaki disease.

There are several reasons for the formation of coronary aneurysms. The main ones are as follows: atherosclerosis, mucocutaneous lymph node syndrome,



Figure 1.
A huge saccular aneurysm of the left coronary artery.



Figure 2.
Dilatation of the right coronary artery on the whole run with its closure in the middle.

*Submission is with the full knowledge and approval of the listed co-authors.

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autoimmune diseases, trauma, dissection, iatrogenic complications, syphilis, and mycotic emboli.¹

The damage caused by the disease can progress and be present in the adult age group, and therefore Kawasaki disease should be included in the differential diagnosis of ischaemic cardiac disease. It is important, especially in young patients without other risk factors.

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Reference

1. Park SH, Kim SE, Ryu SK. Left main coronary artery aneurysm with chronic total occlusion of both left coronary arteries in a young athlete. *Heart* 2001; 85: e1.