Rapidly progressive coronary ostial stenosis after aortic valve replacement in relapsing polychondritis

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Relapsing polychondritis is a rare multisystem disease characterized by inflammation of cartilage and other proteoglycan-rich structures, such as the eye, ear, heart, and blood vessels. Cardiovascular manifestations of this disease are rare, but they are the second most common cause of death in these patients. We report a case of relapsing polychondritis in which the patient underwent aortic valve replacement and had acute myocardial infarction caused by coronary ostial stenosis 6 months after the operation.

Clinical Summary
A 26-year-old woman presented with New York Heart Association class III dyspnea of 6 months' duration. She denied any anginal symptoms. Two years earlier, she was given a diagnosis of relapsing polychondritis that had manifested as inflammation of the ear and depression of the nasal bridge. She had taken 20 mg/d oral prednisolone for a year and discontinued treatment because of side effects. She had recurrent inflammation of auricular cartilage 2 months after stopping treatment. She had taken 20 mg/d oral prednisone. She remained asymptomatic for 6 months and presented one day with acute-onset chest pain. Electrocardiography revealed acute anterior and lateral wall myocardial infarction. Coronary angiography revealed 75% and 90% ostial stenosis of the right and left coronary arteries, respectively. Immediate coronary artery bypass grafting was planned, but she sustained a fatal cardiac arrest while awaiting surgical intervention.

References
Rapidly expanding right coronary artery aneurysm

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Coronary artery aneurysm (CAA) is rare, its etiology is atherosclerotic in the majority of cases, and the right coronary artery (RCA) is the site of predilection. Usually its size remains constant or it enlarges slowly. Therefore, the presence of a CAA is not always considered to be a surgical indication. Anticoagulation and/or antiaggregation are the recommended treatments.

Rapidly expanding right CAA is different; such an aneurysm may rupture with potentially lethal consequences.

We describe the case of a successful repair of a rapidly expanding right CAA with prompt surgical correction.

Clinical Summary
A 50-year-old male patient was admitted to our hospital for coronary angiography in June 2003. He was completely asymptomatic and he denied any history of inflammatory or connective tissue disease. The electrocardiogram showed an abnormal ST tract. Results of the stress test were negative, but he smoked 40 cigarettes per day, was dyslipidemic and hypertensive, and had a positive family history of ischemic heart disease. Coronary angiography revealed normal coronary arteries but with a slow flow of contrast medium in the coronary bed and an aneurysm (Figure 1, A) of the RCA. The patient was prescribed warfarin (international normalized ratio of 2.5) and was discharged from the hospital.

In May 2004 the patient, still asymptomatic, had a repeat coronary angiogram. There was no coronary stenosis, the flow in the coronary bed was as slow as in the previous year, but the right CAA was significantly enlarged (Figure 1, B). The rapidity of enlargement of the CAA prompted surgical intervention even in the absence of symptoms.

References