Bilateral Ostial Coronary Artery Lesions in a Patient with Takayasu’s Arteritis

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Figure 1. Angiogram of the left coronary artery in the anterior-posterior, caudal projection. A tight stenosis of the left main ostium is shown (arrow).

Figure 2. Angiogram of right coronary artery in the left anterior oblique projection, showing a tight stenosis of the right coronary artery ostium (arrow).

Figure 3. An aortogram of the LAO view showing total occlusion of the right subclavian, and severe stenosis of the left vertebral and subclavian arteries (arrow). LAO: left anterior oblique view.
A 32-year-old woman presented with a loss of right and a weak left radial pulse, and a six months history of exertional chest pain. She had no significant risk factors of ischaemic heart disease, no history of coronary artery disease, and no family history of premature coronary or cerebrovascular events. Blood pressure was not measured at the right arm, but was 70/30 mmHg at the left arm, and 120/75 mmHg at the right leg. The heart rate was 75 beats/min and regular, and a cardiac examination revealed normal first and second heart sounds without gallops. Laboratory values were remarkable but for an elevated ESR of 270 mm/hr and a hemoglobin of 9.9 mg/dL.

Electrocardiography demonstrated a normal sinus rhythm and nonspecific ST segment changes. Echocardiography on admission revealed a normal LV systolic function without regional wall motion abnormalities. Coronary angiography revealed severe ostial stenosis of the right and left coronary system (Figures 1, 2). An aortogram revealed total occlusion of right subclavian artery and severe stenosis of the left vertebral and subclavian artery without significant luminal narrowing of either the renal or iliac artery (Figure 3). The patient was subsequently diagnosed as having Takayasu’s arteritis.

The involvement of coronary artery disease in Takayasu’s arteritis is rare. When present, the disease is most commonly confined to the ostial and proximal segments of the coronary arteries. After the administration of prednisolone, an elective coronary artery bypass graft was done. However, the patient died of left ventricular failure during the operation.