An aneurysm of the distal portion of the left anterior descending coronary artery associated with angina pectoris

Angina pektoris ile ilişkili distal sol ön inen koroner arterin anevrizması

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A 61-year-old man was admitted to our department with effort related angina pectoris continued for 3 months. He had no history of any cardiac disease. However, he had hypertension as a risk factor for coronary artery disease. On physical examination his systolic and diastolic blood pressures were 140 and 95 mmHg respectively and heart rate was 82 bpm. No other abnormality was found during examination. Normal sinus rhythm was noticed on his electrocardiogram (ECG). Laboratory tests revealed no pathology. Then the patient was referred to catheterization laboratory for selective coronary artery angiography. Cardiac catheterization revealed a localized dilation at the distal portion of the left anterior descending (LAD) coronary artery consistent with an aneurysm (Fig. 1) without any atherosclerotic involvement in any other territory. Anti-aggregative, anti-ischemic, and anti-hypertensive therapies were started and the patient was discharged for medical follow-up. After a month, the patient was asymptomatic at control examination.

An aneurysm of an epicardial coronary artery is a rare condition and most of the patients are asymptomatic. However, patients may have complications including ischemia, infarction, spontaneous rupture, calcification, thrombus formation, and embolization. The etiologies of this abnormality are atherosclerosis, congenital pathologies, Kawasaki disease, Behcet disease, other rheumatic diseases, and trauma. Aneurysms are most commonly found in the right coronary artery. The LAD involvement is seen at lesser extent. They generally are diagnosed by selective coronary angiography however; some large aneurysms may be detected by echocardiography. Medical management, percutaneous and/or surgical techniques may be used for the treatment of the lesion. Medical treatment is preferred for the aneurysms without stenotic lesions like in our patient. In conclusion, an aneurysm of the coronary artery may cause ischemia and should be considered in the differential diagnosis.



Figure 1. Cardiac catheterization showing the aneurysm of the distal portion of the left anterior descending coronary artery (arrows)