

A Coronary–cameral fistula leading to angina pectoris

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A 77-year-old male with well-controlled hypertension presented to our clinic with angina pectoris on exertion. Five year ago, he had undergone diagnostic coronary angiography due to chest pain and he was reported to have normal coronary arteries. His physical and laboratory findings were normal. Baseline electrocardiography revealed sinus rhythm and negative T waves in V3–V6 leads with left axis deviation (Figure 1). During transthoracic echocardiography, there segmental wall motion abnormality and the patient diastolic dysfunction [left ventricular (LV) wall thickness was increased, E/A ratio was blunted, and left atrial diameter was increased]. Due to the patient's symptoms and our treadmill exercise stress test results, he underwent diagnostic coronary angiography. The angiogram excluded hemodynamically relevant stenosis of the coronary arteries. However, there was a fistula network from the end of the left anterior descending artery and circumflex arteries to the LV cavity during end-diastole similarly a ventriculography pose (Figure 2).

Coronary artery fistulas are rare and have an incidence of 0.2% to 0.6% in angiographic series. A coronary–cameral fistula involve a sizable communication between a coronary artery bypassing

Figure 1. Patient's electrocardiogram revealed sinus rhythm and negative T waves in V3–V6 leads with left axis deviation.

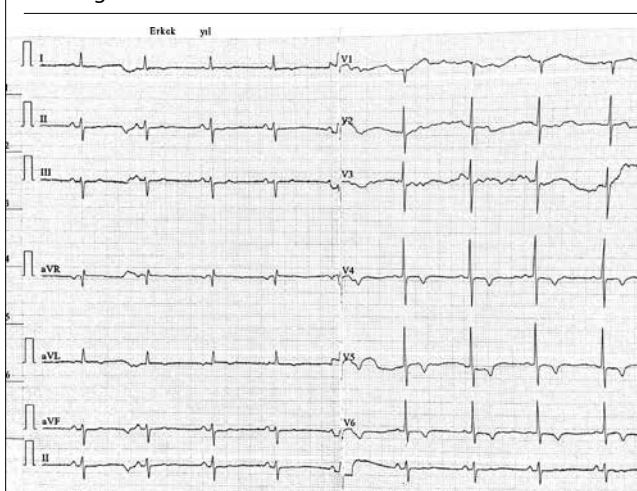
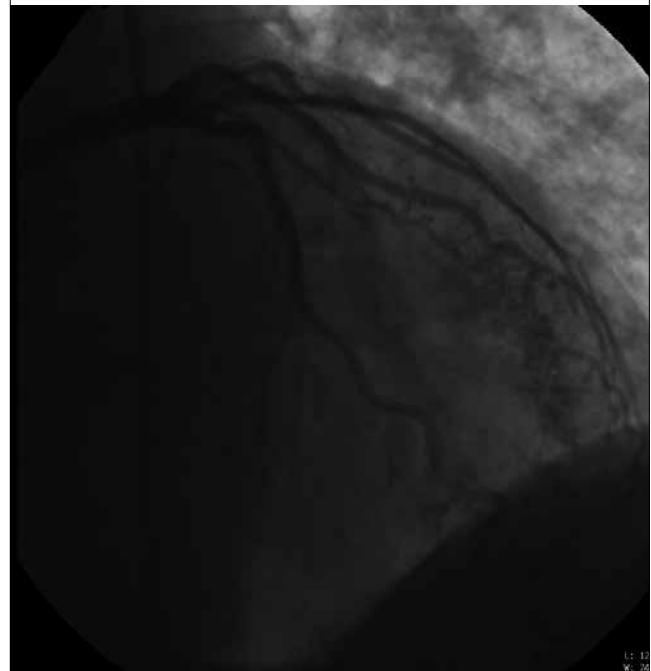


Figure 2. Right coronary oblique view demonstrated an intensive coronary–cameral fistula such as ventriculography pose during diastole.



the myocardial capillary bed and entering either chamber of the heart. Although patients with coronary artery fistulas are frequently asymptomatic, it must be kept in mind that the fistulas can cause ischemic chest pain secondary to coronary steal as well as LV hypertrophy caused by volume overload and increased oxygen consumption.

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