

Images in Cardiovascular Disease



Triple Vessel Coronary Cameral Fistula: A Rare Case of Angina

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Conflict of Interest

The authors have no financial conflicts of
interest.

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A 68-year-old female came to our hospital with exertional chest pain, fatigue, and breathlessness on exertion since the last 3–4 months. On physical examination, her blood pressure was 150/70 mmHg, and her heart rate was 96 beats/min. Electrocardiography showed sinus rhythm and no specific changes in the ST segment or the T wave. Echocardiography revealed ventricles of normal size and function with no regional wall motion abnormality. Coronary angiography revealed multiple fistulae that arose from all three major coronary arteries (left anterior descending, left circumflex, and right coronary arteries) that drained into the left ventricle near the apex (Figure 1, 2, 3 & Movie 1, 2, 3). The coronary arteries were free of any atherosclerotic disease. The patient was discharged from the hospital on optimal medical management including beta blockers and an antihypertensive with instructions for diabetes control.

Coronary–cameral fistulae are a rare anomaly. They are predominantly congenital communications between the coronary arterial circulation and the chambers or great vessels

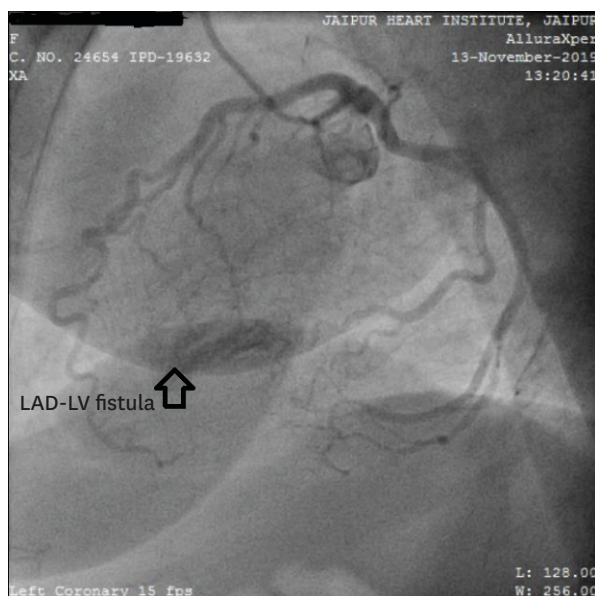


Figure 1. Coronary angiographic projection showing a coronary cameral fistula arising from the left anterior descending artery and draining into the left ventricle.



Figure 2. Coronary angiographic projection showing a coronary cameral fistula arising from the left circumflex artery and draining into the left ventricle.

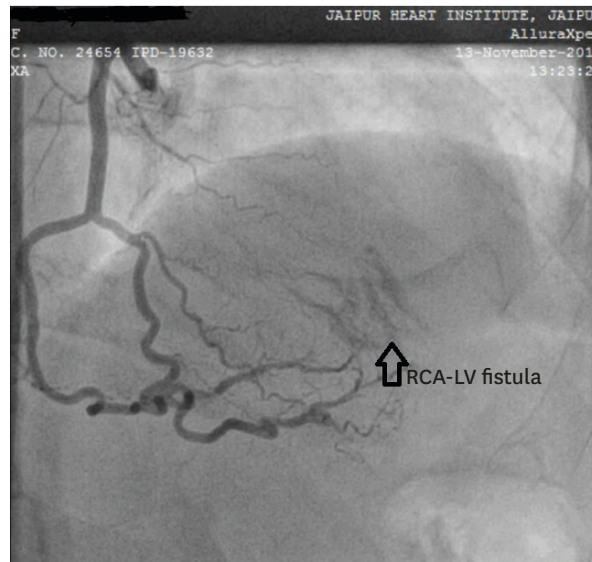


Figure 3. Coronary angiographic projection showing a coronary cameral fistula arising from the right coronary artery and draining into the left ventricle.

of the heart. It is rare that a coronary artery fistula causes myocardial ischemia. Therapeutic approaches are designed to reduce myocardial oxygen demand and thereby ameliorate the demand–supply mismatch.

Coronary arteriography is the best method to determine the origin and drainage of such fistulae; indeed, in our patient, this method showed multiple coronary artery fistulae.

SUPPLEMENTARY MATERIALS

Movie 1

Coronary angiographic projection showing a coronary cameral fistula arising from the left anterior descending artery and draining into the left ventricle.

[Click here to view](#)

Movie 2

Coronary angiographic projection showing a coronary cameral fistula arising from the left circumflex artery and draining into the left ventricle.

[Click here to view](#)

Movie 3

Coronary angiographic projection showing a coronary cameral fistula arising from the right coronary artery and draining into the left ventricle.

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