

A rare coronary artery anomaly: posterior descending artery arising from septal perforator artery

Nadir bir koroner arter anomalisi: Septal perforatör arterden kaynaklanan posterior inen arter

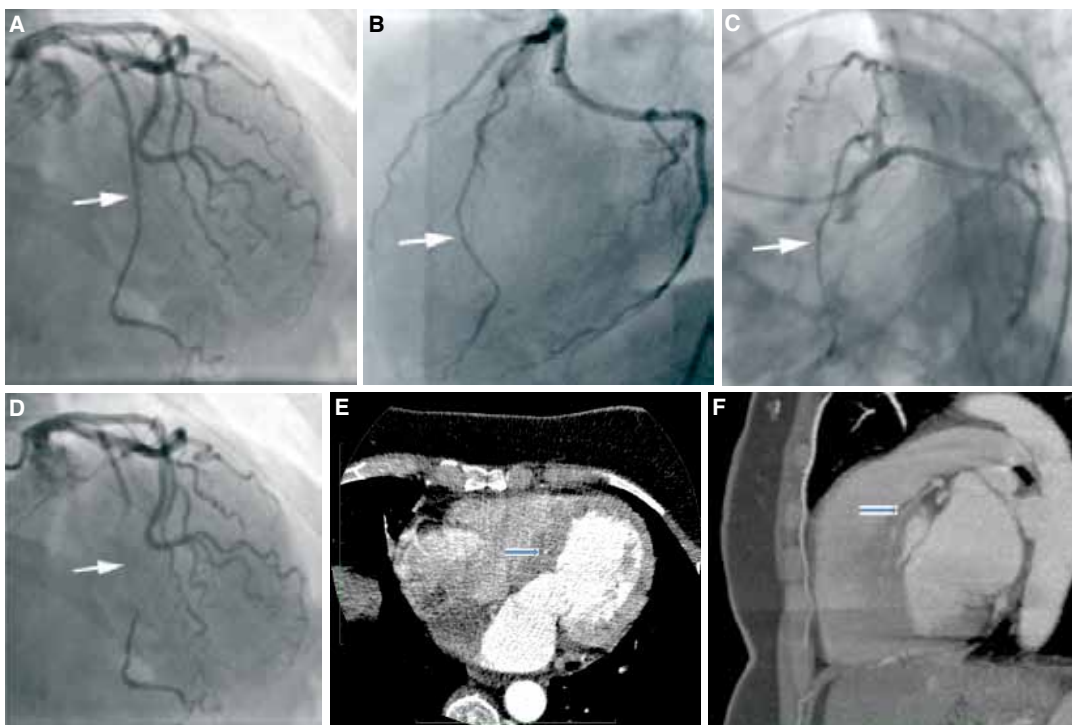
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A 43-year-old female patient admitted to our hospital with the complaints of chest pain and palpitation that had begun in recent months. The pain was dull, radiating to the neck, and not related with exercise. She had no significant medical history prior to this presentation.

On the physical examination, all findings were normal except a moderate apical systolic murmur. Electrocardiography showed sinus rhythm with nonspecific ST-segment and T-wave abnormalities, while transthoracic echocardiography revealed moderate mitral regurgitation and interventricular septal hypertrophy. The conventional coronary angiography detected a

rare coronary anomaly involving the septal perforator artery that gave rise to the posterior descending artery (Fig. A-D). After originating from the left anterior descending artery as a first large branch, the septal perforator artery was seen to cross through the interventricular septum until it appeared over the posterior interventricular groove, in which it was seen to terminate as the posterior descending artery (Video 1*). As the artery passed between the septal muscles, it was narrowing during systole with ventricular contraction (Video 2*). We performed coronary computed tomography angiogram to show other possible anomalies and demonstrated the septal perforator artery's unusual pathway inside the interventricular septum without any other accompanying pathology (Fig. E, F). The patient was discharged without further evaluation and prescribed oral beta blocker to relieve her symptoms.



Figures– (A) Right anterior oblique cranial, (B) left anterior oblique cranial (C) and left anterior oblique caudal views of the conventional coronary angiography showing first septal perforator artery that give rise to posterior descending artery. (D) Septal perforator artery was crossing through the interventricular septum was shown in the image. (E) Coronary computed tomography angiogram images demonstrate the septal perforator artery crossing through the interventricular septum (F) and going along the posterior interventricular groove. *Supplementary video files associated with this presentation can be found in the online version of the journal.