Anomalous origin of the left coronary artery from the pulmonary artery in an elderly patient

Yaşlı bir hastada sol koroner arterin pulmoner arterden köken alması anomalisi

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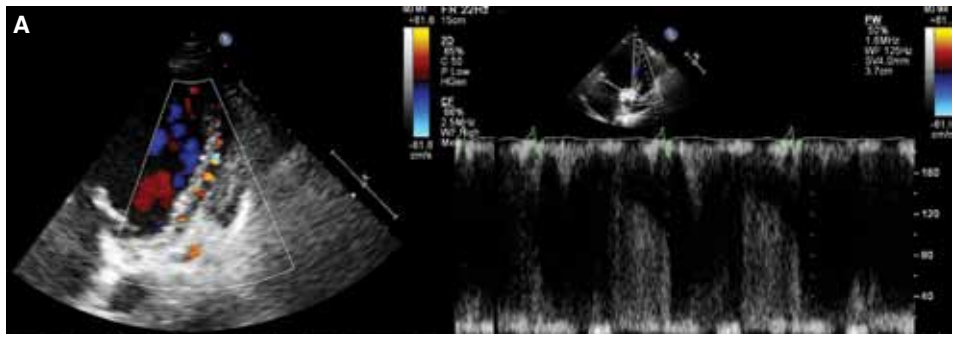
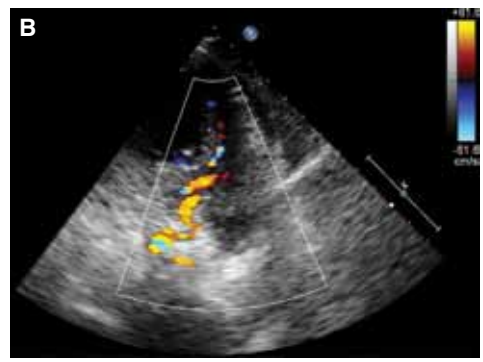
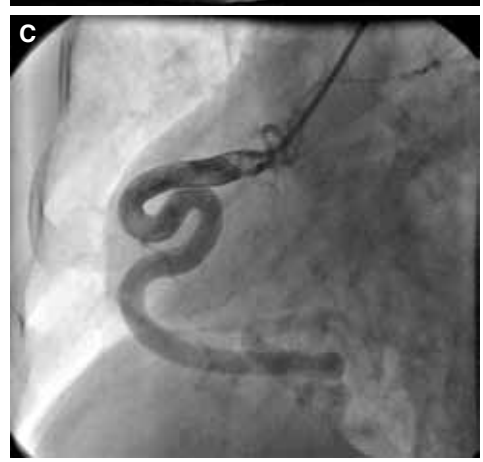
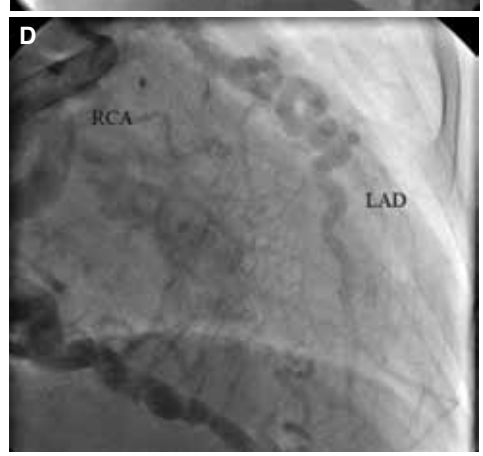


A 60-year-old female patient was admitted with a complaint of exercise-induced chest pain of more than ten-year history. Her medical history was unremarkable except for systemic hypertension. Cardiac auscultation revealed a 2/6 systolic murmur that was best heard over the midcardiac and aortic regions. The electrocardiogram showed nonspecific ST-T changes in lateral leads. Echocardiography showed concentric left ventricular hypertrophy and normal left ventricular systolic function and valves. Color Doppler examination showed an abnormal turbulent flow along the interventricular septum that might be associated with a ventricular septal defect. However, pulsed-wave Doppler interrogation of the turbulent flow revealed a characteristic systolodiastolic flow of coronary arteries (Fig. A, supplementary video file 1*). Parasternal short-axis view at the cardiac base showed the origin of the right coronary artery, and a modified apical 4-chamber view demonstrated a dilated tortuous vessel running through the ventricular septum (Fig. B, supplementary video file 2*). She underwent coronary angiography with a diagnosis of anomalous origin of the left coronary artery from the pulmonary artery syndrome. Selective right coronary angiography showed a dilated tortuous right coronary artery with late visualization of the left coronary artery and pulmonary artery due to retrograde filling from the right coronary artery (Fig. C, D). The size and tortuosity of the right coronary artery corresponded to the vessel visualized on echocardiography (Fig. B). As all coronary arteries and coronary-to-pulmonary attachments were visualized on angiography, no further testing was considered and the patient was referred for surgical intervention.







Figures. (A) Apical 4-chamber view showing an abnormal turbulent flow along the interventricular septum and pulsed-wave Doppler signal compatible with coronary flow, with a greater flow during systole. **(B)** Modified apical 4-chamber view with a slight caudal angulation demonstrating dilated right coronary artery with a tortuous course and continuity with the interventricular septum. Coronary angiograms demonstrating **(C)** a dilated right coronary artery and **(D)** right-to-left collaterals with retrograde filling of the left coronary artery and pulmonary artery. **Supplementary video files associated with this case can be found in the online version.* RCA: Right coronary artery; LAD: Left anterior descending artery.