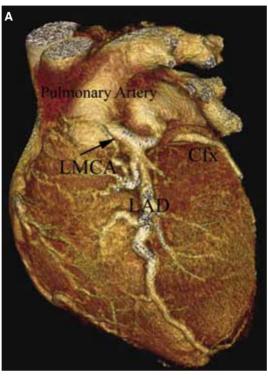
Surgical treatment of an anomalous left coronary artery from the pulmonary artery

Pulmoner arterden kaynaklanan sol koroner arter anomalisinin cerrahi tedavisi

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Anomalous origin of the left coronary artery from the pulmonary artery is a rare congenital anomaly associated with myocardial ischemia and high mortality in the early stages of life. If left untreated, only few



patients can survive presenting with angina or other heart failure symptoms. Treatment consists of surgical reconstruction, creating two coronary systems instead of one. A 20-year-old male patient presented with angina pectoris of one-year history. He had a continuous systolic murmur and echocardiography showed an anomalous left coronary artery from the pulmonary artery due to retrograde flow in the left anterior descending artery, and dilatation of the right coronary artery. Left ventricular functions were normal and no other congenital anomaly was observed. Coronary angiography showed absence of the left coronary artery ostium and general dilatation of the right coronary artery. Computed tomography angiography revealed left coronary artery originating from the pulmonary artery, a dilated right coronary artery (12 mm), and a wide collateral net arising from the right coronary artery supplying the left system (Fig. A). The patient underwent surgical repair consisting of excision of the left coronary ostia and interposition of a saphenous vein graft to the aorta (Fig. B-E). Direct re-implantation was impossible due to insufficient length of the left main coronary artery. The pulmonary artery was reconstructed with a pericardial patch. The patient had an uneventful course and was discharged one week after surgery.

Figures. (A) Three-dimensional computed tomography angiography (CTA) of anomalous left coronary artery from the pulmonary artery. Intraoperative views of the origin of the (B) left main coronary artery (LMCA) and (C) right coronary artery (RCA). (D) The final view of reconstruction with a saphenous vein graft (SVG). (E) Control CTA image showing the SVG graft patent. LAD: Left anterior descending artery; Cfx: Circumflex artery.

