Coronary artery fistula presenting as a left atrial mass

Sol atriyumda kitleye benzeyen koroner fistül

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A 61-year-old female presented with complaints of dyspnea and palpitations. On physical examination, her blood pressure was 130/80 mmHg and pulse rate was 76 bpm. The heart was rhythmic and there was a mild systolic murmur at the apex. The electrocardiogram was in sinus rhythm and there was no abnormality. On transthoracic echocardiography, left ventricular diameters and heart valves appeared normal. There was mild mitral insufficiency. The motion of the posterior wall was hypokinetic. Ejection fraction was

calculated as 40% using the Simpson method. A mass, approximately 25 x 15 mm in size and with irregular borders. was observed in the left atrium, attached to the interatrial septum (Fig. A). The patient was admitted with a presumptive diagnosis of left atrial thrombus. Continuous intravenous unfractionated heparin infusion was initiated and activated partial thromboplastin time was monitored. Surgical treatment was recommended to the patient due to the persistence of the mass and continuation of symptoms. Coronary angiography was performed before surgery to assess left ventricular dysfunction and segmental wall motion abnormality. The left anterior descending and circumflex arteries were normal. During right coronary artery (RCA) injection, an extremely extended vascular structure was noted, which branched from the proximal portion of the RCA compatible to the sinus node artery and formed a multicystic fistula to the left atrium (Fig. B). There was no atherosclerotic lesion in the RCA: however. blood flow from the fistula to the left atrium interfered with the RCA flow (Fig. B, C). The patient was submitted to surgery. The fistula was ligated from the origin under cardiopulmonary bypass. The right atrial mass was primarily repaired by excision and sutured to the fistular opening. One month after surgery, the patient was free of symptoms and had echocardiographically normal left ventricular contraction with normal appearance of the left atrium.

Figures. (A) Echocardiographic apical four-chamber view of the left atrial mass. (B) Right anterior oblique view of the fistula originating from the right coronary artery and terminating in the left atrium after forming multiple vascular channels. (C) Left anterior oblique view of the same fistula. Note marked coronary steal due to increased flow trough the fistula.





