Bilateral Coronary Artery-Pulmonary Fistulae

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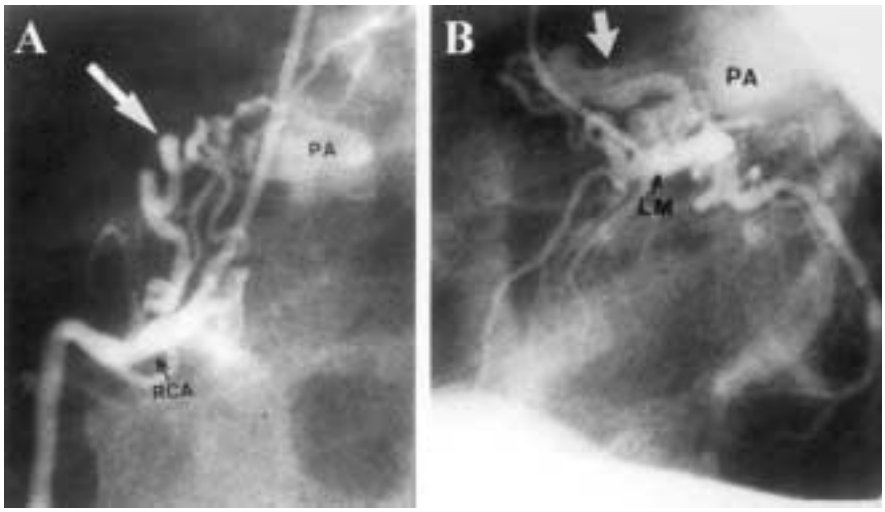

A 52 year old man presented with palpitations and syncope. On examination there were no signs of heart failure, but a continuous systolic-diastolic murmur was heard along the left sternal border. During exercise testing, the patient developed runs of supraventricular tachycardia, while Tl-201 SPECT (single photon emission computed tomography) showed homogenous myocardial perfusion and redistribution. Coronary angiography demonstrated marked dilatation of the proximal left and right coronary arteries, with bilateral coronary fistulae in the form of a network of vessels (white arrows) draining into the main pulmonary artery [Figure]. The left to right shunt was small and not recordable by oxygen sampling (LM = left main coronary artery RCA = right coronary artery).

Coronary arteriovenous fistula is a malformation in which branches of the coronary arteries (single or multiple) drain into the right ventricle (41%), right atrium (26%), pulmonary arteries (17%), left ventricle (3%), or the superior vena cava (1%) [1]. Patients may be asymptomatic (50%), or present with angina pectoris, arrhythmias, congestive heart failure, endocarditis and, rarely, acute myocardial infarction [2]. A precordial continuous murmur is often diagnostic [1]. Surgical or transcatheter correction may be undertaken, depending on the anatomic and physiologic findings in the individual patient [3,4]. This patient, with negligible shunt, was treated conservatively (antiarrhythmics and antibiotic prophylaxis against endocarditis). Eight years after diagnosis the patient is well.

References

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The best throw of the dice is to throw them away

English proverb