PICTURES IN CLINICAL MEDICINE

Bilateral Complex Coronary Artery Pulmonary Artery Fistulas Demonstrated by Multidetector Computed Tomography

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Key words: fistula, coronary artery, computed tomography, pulmonary artery

(Inter Med 47: 1945-1946, 2008)
(DOI: 10.2169/internalmedicine.47.1465)

An 80-year-old woman was admitted to our hospital because of chest discomfort. Emergent coronary angiography revealed bilateral coronary artery fistulas (CAFs) and severe stenosis of the left anterior descending artery (LAD) followed by successful coronary intervention. Three-dimensional volume rendered computed tomography angiography (CTA) (Aquilion™ 16 TSX-101A, Toshiba, Otawara, Japan) images demonstrated a complex CAF composed of a...
plexus of tortuous vessels arising from the proximal LAD and running along the surface of the main pulmonary artery trunk (MPA) with multiple drainage sites (arrows). The other CAF (arrow heads) was shown arising from the proximal right coronary artery (RCA) terminating into MPA. Although bilateral CAFs are quite rare, they may cause some complications such as cardiac heart failure, myocardial ischemia, infectious endocarditis, and coronary aneurysm. CTA can provide an accurate anatomical description and it is a valuable technique for the non-invasive evaluation of CAF.