Delineation of a coronary artery to pulmonary artery fistula by multidetector computed tomography angiography

A 62-year-old male patient was admitted to our clinic with atypical angina. The only risk factor for coronary heart disease was smoking. Exercise stress test showed an abnormal result. Coronary angiography was performed. During selective left coronary angiography, a fistulous connection was detected between the septal branch of the left anterior descending coronary artery and the pulmonary artery (Fig. A, B). Other vascular territories were normal. Right cardiac catheterization revealed a mild oxygen step-up in the pulmonary artery. For further anatomical description, multiple detector-row computed tomography angiography on a 16-channel scanner was performed with ECG gating. Volume-rendering images showed a tortuous fistula originating from the septal branch of the left anterior descending coronary artery and draining into the pulmonary artery (Fig. C, D). Percutaneous transcatheter coil embolization of the fistula was recommended.

Multidetector row-computed tomography is an emerging practical method for further investigation of the relations between coronary artery fistulae and other structures like pulmonary arteries, providing more precise information on their origin and course.

Figures. Selective left coronary arteriograms (A) in the left lateral projection and (B) right anterior oblique projection with caudal angulation and (C, D) reconstructed three-dimensional and colored computed tomography angiography images in the left anterior oblique projection with cranial angulation show a fistulous connection between the septal branch (SB) of the left anterior descending coronary artery and pulmonary artery (black arrows).

Görüntülü olgu örnekleri

Case images

Koroner arter-pulmoner arter fistülünün çokkesitli bilgisayarlı tomografi anjiyografi ile ayrıntılı değerlendirilmesi

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