

Noninvasive evaluation of a giant circumflex coronary artery aneurysm fistulized into the coronary sinus by multislice computed tomography
Koroner sinüse fistülize dev sirkumfleks koroner arter anevrizmasının çokkesitli bilgisayarlı tomografi ile noninvaziv değerlendirilmesi

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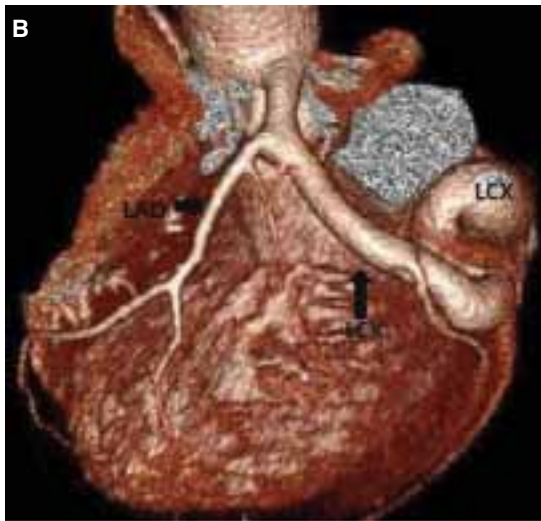
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A 46-year-old man was referred to our hospital for further evaluation of a coronary artery fistula that had been incidentally detected by coronary angiography. He had burning type chest pain, shortness of breath on exertion, and palpitations for over two years. An echocardiogram showed a mildly dilated left ventricle with an ejection

fraction of 45%, with no signs of a coronary artery fistula. The angiogram did not show any atherosclerotic disease, but demonstrated an unusually dilated circumflex artery and drainage into the right-side cardiac structures with a fistula (Fig. A). It was difficult to identify the exact location of the drainage site. The diagnosis was accomplished by cardiac-gated 64-slice computed tomography that clearly showed a giant circumflex aneurysm with a very tortuous course terminating in a large fistulous connection into the coronary sinus (Fig. B, C). Thallium-201 myocardial perfusion scintigraphy performed to



assess myocardial ischemic findings showed inferior and lateral ischemia, suggesting coronary steal. Considering the clinical symptoms of heart failure and myocardial ischemia and the large size of the fistula, surgical repair was planned for ligation of the aneurysmal fistula at both the origin and drainage sites as well as grafting the marginal branch. This treatment plan was refused by the patient.



Figures. (A) Coronary angiogram showing a tortuous aneurysmal circumflex artery opacifying the right atrium. **(B, C)** Multislice cardiac-gated computed tomography scans showing the left anterior descending artery and a giant circumflex aneurysm with a very tortuous course terminating in a large fistulous connection into the coronary sinus. LAD: Left anterior descending artery; LCX: Left circumflex artery.