



IMAGE IN CARDIOLOGY

Multiple coronary artery aneurysms



Múltiplos aneurismas nas artérias coronárias

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A 71-year-old woman was admitted electively to our hospital in October 2013 for vascular surgery of an abdominal aortic aneurysm, diagnosed two months before through abdominal ultrasound performed on an outpatient basis due to recurrent abdominal pain.

Her medical history included hypertension and dyslipidemia. No other cardiovascular disease was known.

During the surgical procedure, the patient developed acute pulmonary edema and was transferred to the intensive care unit. The physical exam was notable for a harsh, grade IV/VI mitral systolic murmur and diffuse lung crackles.

Transthoracic echocardiography performed at the patient's bedside showed moderate depression of left ventricular systolic function (40% ejection fraction) and severe mitral regurgitation. Since abdominal aortic aneurysms are frequently associated with clinically significant coexisting coronary artery disease, after hemodynamic stabilization coronary angiography was performed. This showed multiple aneurysms involving all the main coronary arteries without significant stenosis (Figure 1). To better assess the coronary arteries cardiac computed tomography was performed, which showed a large aneurysm involving the anterior descending and circumflex arteries. The right coronary artery also had an aneurysm, smaller than in the left coronary (Figures 2 and 3).

It is still not known how best to handle such aneurysms, and the type of surgical intervention should be



Figure 1 Coronary angiography: multiple coronary artery aneurysms involving all main coronary arteries.

individualized depending on the patient's clinical characteristics. In this case the option was for medical treatment. During hospitalization, the patient developed atrial fibrillation, so it was decided to maintain antithrombotic therapy after hospital discharge.

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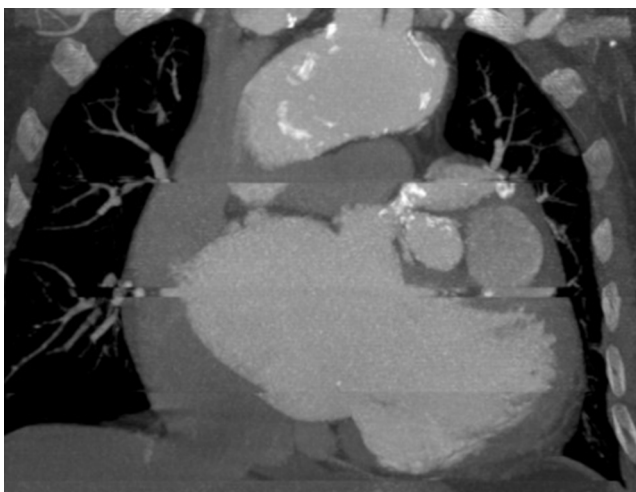


Figure 2 Cardiac computed tomography: a large aneurysm involving the anterior descending and circumflex arteries.

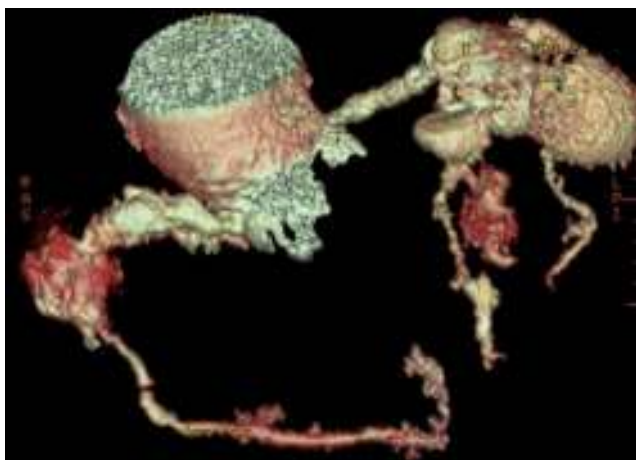


Figure 3 Cardiac computed tomography: coronary artery aneurysms in all epicardial coronary arteries.

Ethical disclosures

Protection of human and animal subjects. The authors declare that no experiments were performed on humans or animals for this study.

Confidentiality of data. The authors declare that they have followed the protocols of their work center on the publication of patient data.

Right to privacy and informed consent. The authors have obtained the written informed consent of the patients or subjects mentioned in the article. The corresponding author is in possession of this document.

Conflicts of interest

The authors have no conflicts of interest to declare.