

IMAGE IN CARDIOLOGY

Severe aneurysmal coronary artery disease in a patient with ulcerative colitis

Doença coronária aneurismática grave num doente com colite ulcerosa

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Received 23 December 2011; accepted 15 January 2012

Formation of coronary artery aneurysms in the setting of systemic inflammatory conditions is rare but has been described.

We report a case of severe aneurysmal coronary artery disease leading to an acute coronary event in a patient with ulcerative colitis.

A 67-year-old Caucasian man with a medical history of ulcerative colitis and hypertension presented with chest pain and diaphoresis ongoing for 12 hours. His physical examination was unremarkable; electrocardiography revealed inverted T waves in leads I, aVL and V4–V6, and troponin I

levels were initially positive at 14.7 ng/dl, reaching a maximum of 40.8 ng/dl. Echocardiography showed hypokinesia of the lateral wall of the left ventricle and an ejection fraction of 0.51. Subsequent cardiac catheterization revealed diffuse three-vessel aneurysmal coronary artery disease without flow-limiting stenoses (Figure 1) and the image of a recanalized thrombus in the aneurysmal first diagonal (the culprit lesion).

Coronary computed tomography (Figure 2) performed to better define the size and location of the aneurysms confirmed severe three-vessel aneurysmal disease and showed

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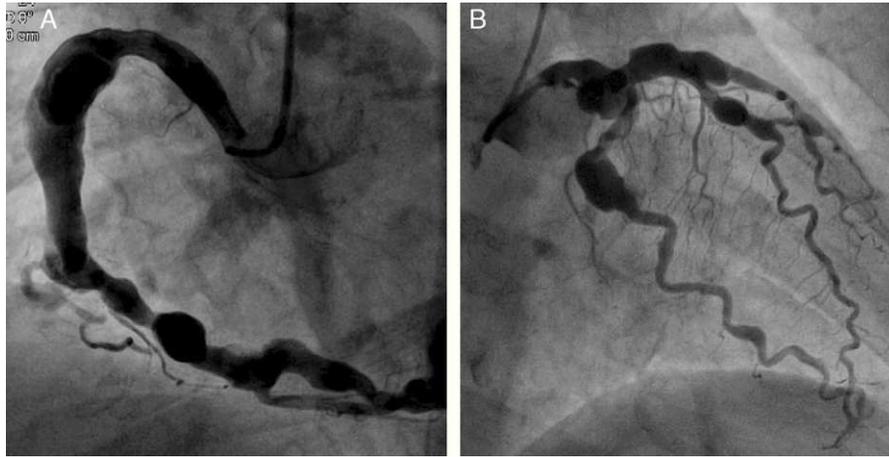


Figure 1 Right and left coronary angiography showing severe diffuse aneurysmal coronary artery disease. (A) Selective right coronary angiogram in left anterior oblique view showing a large aneurysm involving the proximal and mid segments of the right coronary artery (maximum diameter 12 mm) as well as multiple smaller aneurysms in the distal segment of the vessel and in the posterolateral branch. (B) Selective left coronary angiogram in right anterior oblique view showing multiple aneurysms involving the distal portion of the left main coronary artery (LMCA), the proximal and mid segments of the left anterior descending (LAD) coronary artery and the proximal segment of the circumflex and the marginal branch.

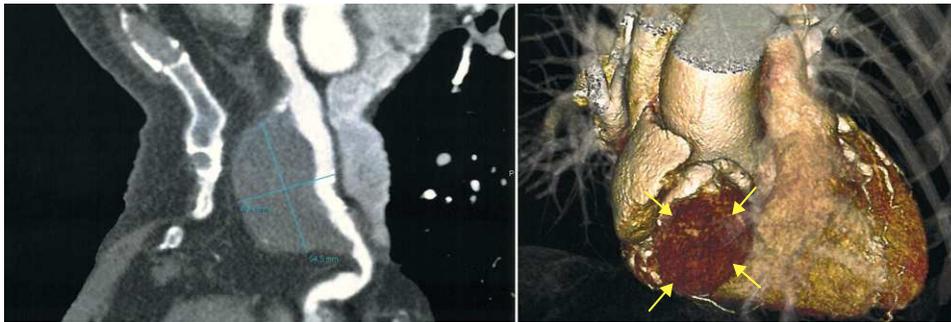


Figure 2 Coronary computerized tomography. (A) Axial image showing a giant thrombosed right coronary aneurysm with maximum dimensions of 40.4 mm × 54.5 mm, thus demonstrating that the true size of the aneurysms had been significantly underestimated on angiography. (B) Volume-rendered MDCT reconstruction showing the 3D relationship of the giant aneurysm (yellow arrows) to adjacent cardiac structures.

a giant thrombosed right coronary aneurysm with maximum dimensions of 40.4 mm × 54.5 mm, thus demonstrating that the true size of the aneurysms had been significantly underestimated on angiography.

After consulting with the cardiac surgeons, it was decided to adopt a conservative approach due to the diffuse nature of the disease and the absence of flow-limiting stenoses.

The patient had an uneventful hospitalization and was discharged on aspirin and warfarin therapy.

Conflicts of interest

The authors have no conflicts of interest to declare.