

Image in cardiology

Giant Aneurysm of Saphenous Vein Coronary Graft

Aneurisma gigante sobre injerto coronario de safena

Rafael Muñoz, Javier Miguelena,* and Andrea Ferreiro

Servicio de Cirugía Cardíaca Adultos, Hospital Ramón y Cajal, Madrid, Spain

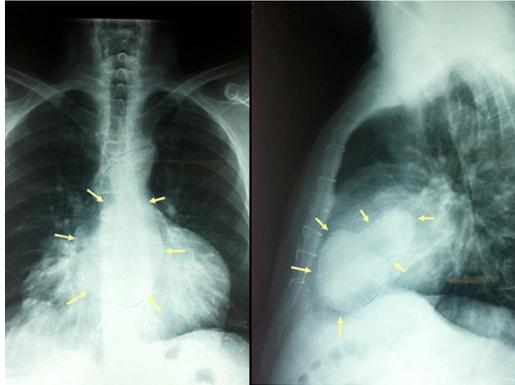


Figure 1.



Figure 2.

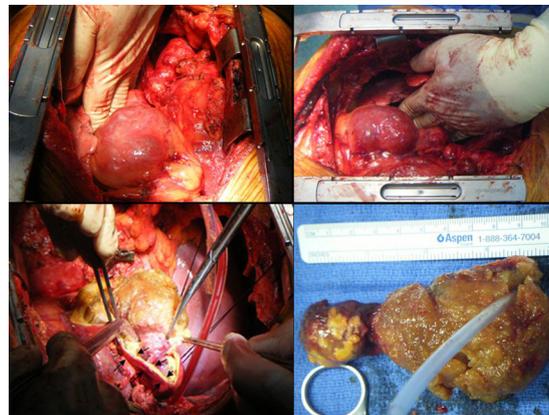


Figure 3.

A male patient aged 74 years who underwent a quadruple aortocoronary bypass with saphenous vein grafts in 1986. He had been asymptomatic until 1 year before and presented with progressive dyspnea after moderate physical exertion. A chest x-ray revealed a mass on the right paracardiac silhouette (Fig. 1). The echocardiogram showed a 65×86 mm fluid-filled mass attached to right cavities, moderate mitral regurgitation and a preserved ejection fraction. Thoracic computed tomography showed a right coronary bypass with a pseudoaneurysm and thrombosis of the aneurysmatic sac producing extrinsic compression to the right atrium (Fig. 2).

Surgery was performed (Fig. 3) to exclude the aneurysm from the circulation. While radiological imaging had suggested a pseudoaneurysm, the surgical procedure revealed the involvement of all layers of the graft wall (Fig. 3, arrows in left lower panel); it was a true aneurysm containing abundant atherothrombotic material. A mitral prosthesis was implanted and myocardial revascularization was performed.

Aneurysmatic degeneration of saphenous vein coronary artery grafts is a rare complication that generally appears late. Most of these cases are asymptomatic, although they may also be accompanied by angina, heart attack or dyspnea. The suspected diagnosis should be made when a mediastinal mass is discovered in the thoracic x-ray of a patient with a history of coronary revascularization. A computerized tomography and coronary angiography should be performed in order to confirm the diagnosis.

Due to the significant morbidity and mortality risk inherent to the risk of rupture, embolization or heart attack, surgery to remove or exclude the aneurysm should be considered as definitive treatment.

* Corresponding author:

E-mail address: jmiguelena@hotmail.com (J. Miguelena).

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