Penetrating Atherosclerotic Ulcer of the Descending Aorta

A sixty-one-year-old man with a history of arterial hypertension went to the emergency room secondary to intense interscapular pain, suggestive of dissection. Physical examination revealed diaphoresis, a systolic arterial pressure of 165 mm Hg, and symmetric peripheral pulses.

Electrocardiogram (ECG) revealed a sinus rhythm with signs of left ventricular hypertrophy. Thoracic computerized tomography (CT) with 3-dimensional reconstruction of the large vessels showed an adventitial hematoma of the proximal third of the descending thoracic aorta with a 16×10 mm sacular penetrating ulcer on the anterior face. Imaging of an endoluminal dissection showed the diameter of the thoracic aorta to be 33 mm (Figure 1). During surgery external examination revealed a thoracic aorta with a subadventitial hematoma in the upper half; resection of approximately 6 cm of the aortic portion was performed and replacement was made with a Dacron prosthesis. The excised portion revealed an atherosclerotic aorta with a hematoma on the wall and an opening on the endothelial wall corresponding to a sacular pseudoaneurysm. This was associated with multiple ulcerations on the remainder of the aortic wall (Figure 2).

Fernando Hornero Sos,ª José A. Montero Argudo,ª and Vicente Cervera Devalª
Servicios de ªCirugía Cardíaca y ªRadiodiagnóstico.
Hospital General Universitario. Valencia. España.

Full English text available at: www.revespcardiol.org