Image in cardiology

Epipericardial Fat Necrosis

Necrosis de la grasa epipericárdica

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Figure.

A 57-year-old man with no cardiovascular risk factors or other disease history of interest developed acute chest pain without clear signs of angina. He came to the emergency department, where the results of the electrocardiogram and an initial test for markers of myocardial injury were normal. We performed cardiac computed tomography, which ruled out the existence of coronary artery lesions. However, images of the fat at the left cardiophrenic angle (Figure) revealed a poorly defined increase in the density (arrows), with a central zone of the same density as that of the mediastinal fat (asterisk). Within the lesion, there was a modest increase in density in the form of fine filaments. These findings are typical of pericardial fat necrosis. This is an uncommon, benign condition that presents clinically with acute onset chest pain in previously healthy individuals. The etiology is unknown, and it has the same anatomic pathological features as fat necrosis at other sites (breast, epiploic appendages). The pain is self-limiting and lasts for only a few days; thus, symptomatic treatment is sufficient.

Acute onset chest pain is a common cause for emergency department visits, and the etiology is sometimes difficult to determine. In this context, cardiac computed tomography is becoming established as a rapid and widely available technique that provides a great amount of information on both cardiac and extracardiac structures. Although this technique may not provide images of coronary artery lesions, the examination of the remaining structures is also important. In some cases, it will enable us to establish the etiology, initiate the most adequate treatment, and avoid unnecessary additional studies.

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