CHEST GOSSYPIBOMA AFTER CORONARY SURGERY

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Key-word: Foreign bodies

Background: A 70-year-old woman, with medical history of coronary artery disease treated by coronary aortic bypass grafting (CABG) 10 years ago, was admitted because of recurrence of anginous complaints. After evaluation of the cardiac function, a repeated CABG was indicated. This procedure was carried out without complications.
Work-up

Conventional radiography of the chest (PA-view) (Fig. 1) shows a large, rounded, but homogeneous opacity at the left hemithorax, superimposed on the heart shadow.

Contrast-enhanced CT scan of the thorax at the level of the heart (Fig. 2) demonstrates a rounded, hypodense mass of 8 cm in diameter, located posterior to the left atrium and ventricle of the heart (asterisk). Ill-defined peripheral enhancement is noticed.

MRI of the chest at the level of the heart (Fig. 3) shows on sagittal section (HASTE sequence, moderately T2-weighted image) through the mass at the level of the left ventricle (A) presence of retrocardiac mass, with centrally mixed heterogeneous signal intensity and thick hypointense surrounding capsule. On transverse Gadolinium-enhanced T1-weighted images without (B) and with (C) fat suppression, the center of the lesion remains hypointense, without enhancement, while the periphery shows pronounced enhancement. The latter is best observed on the images with fat suppression (arrow).

Radiological diagnosis

Thoracotomy revealed a retrocardiac mass, consisting of a reactive granuloma, encapsulating a gauze (textiloma, gossypiboma) that was missing after the first operation 10 years earlier. Patient also underwent another CABG and recovered uneventfully.

Discussion

A textiloma (gossypiboma or cottonoid) is a complication due to misplaced or lost textile material during surgery. The term refers to a surgical sponge and the surrounding foreign body reaction. In some cases, it may cause serious symptoms, and should therefore, be considered as a major complication of surgery. Often the radiologist is the first medical investigator confronted with – the complications of – a retained surgical sponge. The diagnosis of textiloma is usually made as a result of radiologic studies, performed because of uncharacteristic discomfort of the patient or as a routine postsurgical follow-up. Occasionally the retained textile material is found incidentally many years after surgery, as in the presented case.

Since retained surgical sponges are a rare finding, making the correct diagnosis may be difficult, even if sponges with radiopaque filament are used. The variable appearance of textilomas may lead to diagnostic misinterpretations. Therefore, other mediastinal or pleural masses should be included in the differential diagnosis.

The common types of primary pericardial tumors include mesothelioma, lipoma and sarcoma. Bronchogenic cyst and possible sequestration should also be considered. Malignancy is less likely. Tumors involving the pericardium are uncommon, and are mostly due to direct invasion or to second spread, occurring lately in the disease process. Metastatic disease is most commonly associated with primary lung, breast and esophageal cancer.

Retained surgical sponges cause foreign body reactions of the surrounding tissue, since they are inert and show no specific decomposition. This can lead to an aseptic foreign body granuloma with fibro-blastic reaction and complete encapsulation, often without clinically significant symptoms. Abscess formation is a rare complication, but usually provokes severe clinical symptoms. In conclusion, sometimes when you hear hoof beats, it is a zebra.

Bibliography