

## A giant seroma inducing changes in the position of the pacemaker

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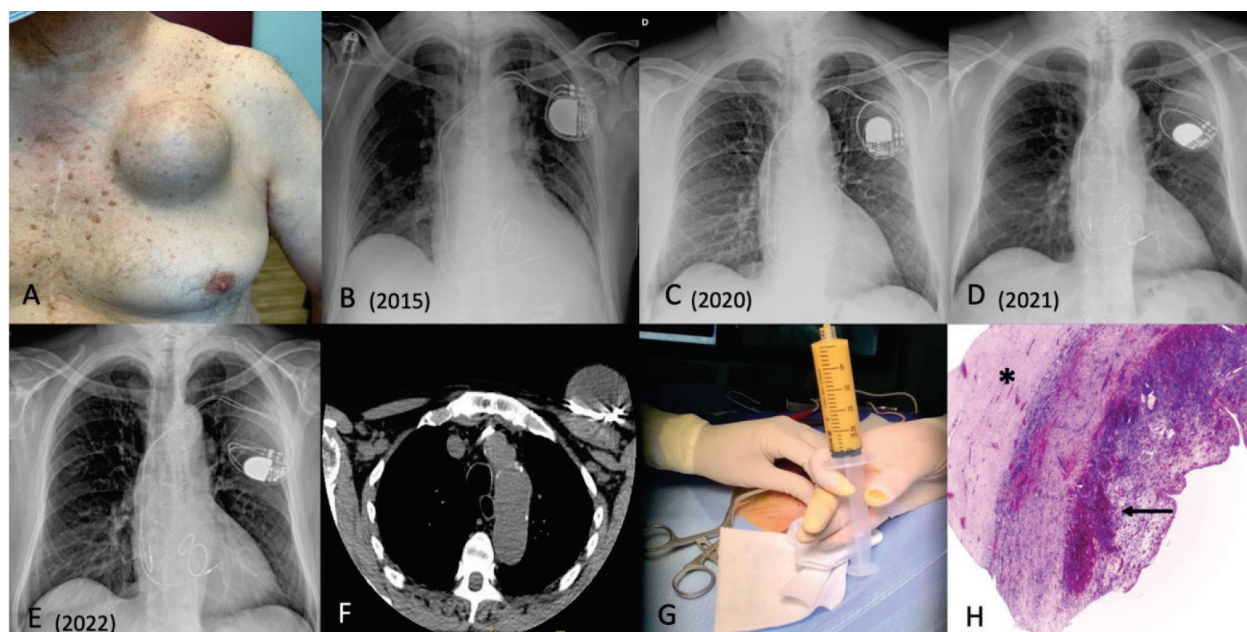
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A 72-year-old man with a medical history of aortic and mitral valve prostheses, anticoagulation therapy, and a pacemaker was referred for a large lesion on the pacemaker pocket. He noticed a growing lesion several months after the implantation, which gradually enlarged over a 7-year period. Physical examination revealed a large lesion under tension without erythema, pain, or heat (Fig. 1A). Laboratory tests, including hemogram,

CRP, procalcitonin, and blood cultures, were normal. A transesophageal echocardiogram ruled out pacemaker lead and prosthetic valve infections. A series of chest X-rays showed changes in the position of the pulse generator and leads over the years (Fig. 1B–E). Chest-CT scan showed a collection surrounding the device (Fig. 1F). A pocket revision drained 280 mL of a yellowish-brown odorless liquid (Fig. 1G). Histopathological analysis revealed



**Figure 1A.** A chronic large lesion on the pacemaker pocket; **B–E.** Changes in the position of the pacemaker and leads over a 7-year period; **F.** Chest CT scan showed a well-defined heterogeneous and hypodense lesion with liquid density measuring 69 × 60 × 30 mm; **G.** A pocket revision drained a yellowish-brown odorless liquid; **H.** Wall of neoformed cavity with fibrosis (asterisk) and a chronic inflammatory infiltrate associated with foci of old and recent hemorrhage (arrow) (H&E, × 25). Histopathological findings revealed a chronic expanding hematoma

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an organized hematoma with fibrotic encapsulation showing hemosiderophages (Fig. 1H). The stains were negative for bacteria and fungi. Tissue, swab, and liquid cultures were negative. The diagnosis of a chronic expanding hematoma, also called a seroma, was made. Long-term follow-up showed a favorable evolution.

Seroma is a rare complication of the pacemaker pocket, which grows slowly over time. The etiology is related to disruption of lymphatic and vascular drainage that leads to transudative fluid collection. Its self-expanding nature is related to a dense capsule with a chronic inflammatory reac-

tion triggered by the irritant effect of blood, which may be exacerbated by anticoagulation therapy, as in our case. The differential diagnosis includes infection, benign tumors, and malignancies. Therefore, a careful evaluation is necessary for appropriate treatment.

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