

## Upper-Extremity Deep Vein Thrombosis in a Patient with Pacemaker

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A 43-year-old man with serological disease and Chagas disease, who consults for a syncopal episode and pauses longer than 2500 ms in Holter. He is implanted a dual-chamber pacemaker via the right subclavian vein; 45 days after implantation, the patient refers feeling of heaviness, numbness, and edema of the right arm and axillary region, with pain and difficulty moving that arm.

Physical exam shows a marked asymmetry between the upper limbs, most evident in his right shoulder and deltoid region, with supraclavicular fullness, effacement of the deltopectoral groove, and increased superficial venous circulation (Figure 1).

Chest x-ray shows soft tissue stress in the right axillary region, secondary to subcutaneous tissue edema (Figure 2).

Upper extremity venous Doppler ultrasound shows:

- Dilated axillary vein (11.6 mm) and multiple hyperechoic images corresponding to thrombus.
- Absence of Doppler signal inside the axillary vein (Figure 3). Findings consistent with deep vein thrombosis.

Venous-access thrombosis of a pacemaker or implantable cardioverter defibrillator has been reported in several series, with an incidence between 6 and 48%, mostly asymptomatic. Only 0.5% may show significant symptoms, being the presence of more than one electrode wire in the vascular access a strong predictor of the event.

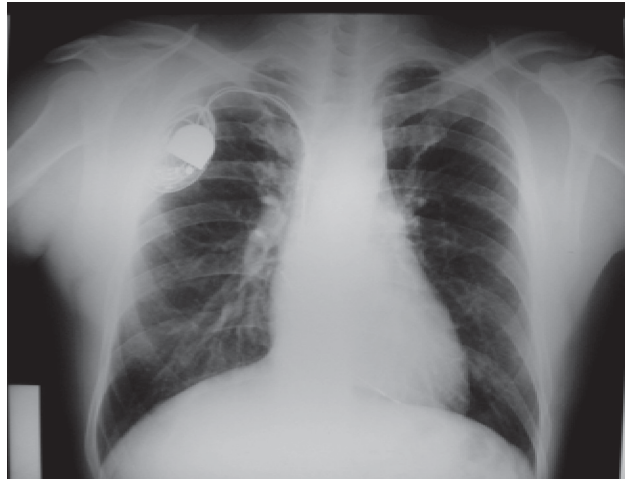


Fig. 2.



Fig. 1.

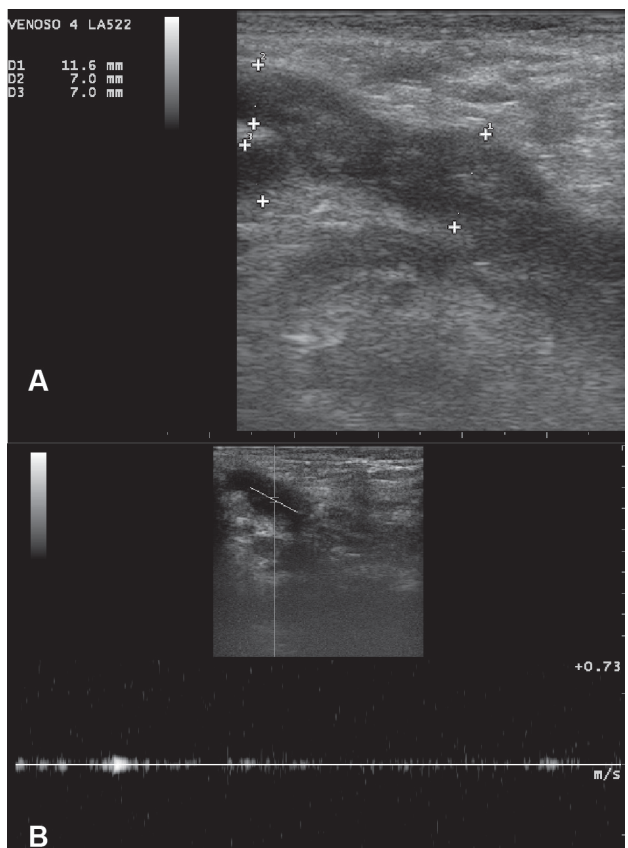


Fig. 3.