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CASE VIDEO

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Left internal jugular vein thrombosis secondary to pacemaker insertion

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Abstract

Venous thrombosis associated with pacemaker implant is a known phenomenon. We present a clinical video emphasizing on an important physical examination finding suggesting propagation of thrombus in internal jugular vein secondary to pacemaker insertion, which would be educational and help readers visualize the sign on physical examination.

KEYWORDS internal jugular vein, pacemaker, thrombosis

QUESTIONS 1

What is an interesting clinical sign to look for in patients presenting with internal jugular vein thrombosis after pacemaker insertion?

An 89-year-old female patient underwent biventricular pacemaker insertion for Mobitz type 2 s degree heart block. Three months later, she came with left shoulder swelling. Physical examination revealed soft tissue swelling on the left shoulder, absent left jugular venous pulsation, and presence of venous pulsation on the right side (Video S1). Doppler ultrasound confirmed left internal jugular vein thrombosis.

Her symptoms improved after treatment with heparin followed by DOAC.

Absence of internal jugular venous pulsation ipsilateral to pacemaker lead insertion, and presence of JVP on the contralateral side suggests extension of thrombus in internal jugular vein.¹ Management includes anticoagulation for 3 months without removal of the device.²

AUTHOR CONTRIBUTIONS

Aisha Akhtar involved in conception, acquisition, draft, and review. Santosh Dhungana involved in acquisition, draft, and review. Nidhi Bhagat involved in acquisition and review. Ghassan Bachuwa involved in review.

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Published with written consent of the patient.

CONFLICT OF INTEREST

None declared.

DATA AVAILABILITY STATEMENT

Data sharing is not applicable to this article as no new data were created or analyzed in this study.

CONSENT

Appropriate informed consent was obtained from the patient for possible publication of image. Patient verbalized understanding.

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SUPPORTING INFORMATION

Additional supporting information may be found in the online version of the article at the publisher's website.

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