



A Case Report: Upper-Extremity DVT Presenting with Sensory Symptoms Mimicking Peripheral Neuropathy

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INTRODUCTION

Upper-extremity deep vein thrombosis (DVT) is an uncommon condition and may present with nonspecific clinical manifestations. In rare instances, venous congestion can produce sensory symptoms that resemble peripheral neuropathy, potentially leading to diagnostic confusion and delay. Electrodiagnostic studies may provide important clues when the clinical presentation and neurophysiologic findings are incongruent with typical neuropathic patterns. We report a case of upper-extremity DVT initially presenting with unilateral upper-extremity sensory symptoms and swelling, mimicking peripheral neuropathy, in which electrodiagnostic findings prompted further vascular investigation and facilitated the final diagnosis.

CASE

A 64-year-old woman presented with a 4-month history of unilateral swelling and paresthesia of the right upper extremity, with symptom aggravation over the preceding 2 months. She described numbness extending from the right axilla to the ulnar aspect of the forearm, while the hand and fingers were relatively spared.

Nerve conduction and electromyographic studies were performed to evaluate suspected peripheral neuropathy. Electrodiagnostic testing showed a focal sensory abnormality of the right medial antebrachial cutaneous nerve without motor involvement or denervation on needle electromyography, inconsistent with a typical peripheral nerve or brachial plexus lesion. In light of this atypical pattern, a more detailed physical examination was performed. This revealed diffuse edema of the right arm and forearm with dilated superficial veins. Radial pulse was preserved during provocative testing, and there was no focal tenderness in the pectoral or subclavicular region. These findings suggested venous outflow obstruction, and CT venography was performed.

CT venography subsequently revealed deep vein thrombosis involving the right distal brachial, axillary, and subclavian veins, with suspected narrowing at the costoclavicular space. The patient underwent endovascular treatment, including thrombectomy and percutaneous transluminal angioplasty. The thrombus was largely fibrotic, consistent with chronic-phase DVT, and complete flow restoration was not achieved.



Figure 1) CT venography of the right upper extremity. (A) Coronal and (B) axial views demonstrate deep vein thrombosis in the right subclavian vein with adjacent perivascular infiltration (white arrows). Suspicious narrowing of the right costoclavicular space is also noted, suggesting venous outflow obstruction.

CONCLUSION

This case highlights that upper-extremity DVT may initially present with sensory symptoms mimicking peripheral neuropathy. Electrodiagnostic abnormalities should be interpreted cautiously, particularly in the presence of significant limb swelling, as edema itself may affect sensory nerve conduction and lead to misleading findings. A comprehensive diagnostic approach integrating electrodiagnostic studies, detailed physical examination, and timely vascular imaging is essential for accurate diagnosis and appropriate management. Such an integrated approach may help avoid diagnostic delay and prevent progression to chronic venous obstruction and persistent symptoms.