Agri 2025;37(1):70–71
doi: 10.14744/agri.2023.92332

Symptomatic schwannoma diagnosed during ultrasound-guided interventional pain management

Damla Yürük,[1] Hüseyin Alp Alptekin[2]

[1]Department of Pain, Etlik City Hospital, Ankara, Türkiye
[2]Department of Pain Clinic, Health Sciences University Dışkapı Yıldırım Beyazıt Training and Research Hospital, Ankara, Türkiye

To the Editor,

We present the diagnosis and treatment of a patient with a schwannoma originating from the median nerve in the upper arm. A 38-year-old male presented with burning pain in the hand that radiated from the left arm. He stated that his complaints had lasted for approximately one year, had previously visited many health institutions, and was referred to the electrophysiology department with a pre-diagnosis of median nerve entrapment. Electrophysiological evaluation was consistent with chronic axonal damage to the left median nerve in the arm segment before branching into the pronator teres muscle.

The patient was then referred to our pain clinic for interventional treatment as there was no response to nonsteroidal anti-inflammatory drugs or neuropathic pain agents. The patient had no history of systemic diseases or trauma. Physical examination revealed hypoesthesia around the forearm, thumb, second and third fingers, and left-hand weakness. Tinel's sign was positive 5 cm above the elbow medial to the biceps muscle. Ultrasound-guided injection of the median nerve was planned for therapeutic purposes.

Ultrasonography of the left median nerve revealed a solid, heterogeneous/hypoechoic mass including cystic areas in the center, with a diameter of 2×2.5 cm, at the middle of the humerus (Fig. 1a–c). The injection procedure was stopped and the patient

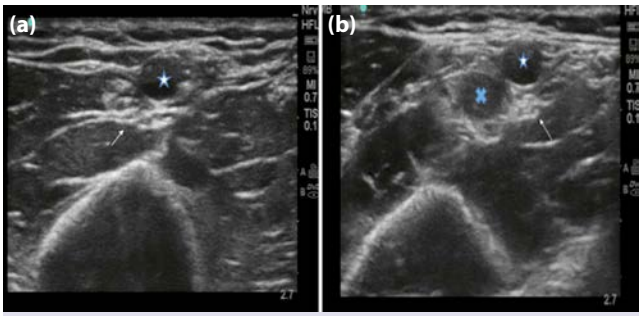

Figure 1. Ultrasonographic scan of the median nerve **(a)** Short axis view of the median nerve (white arrowhead) in close proximity to the brachial artery (asterisk) at the level of the lower 1/3 of the humerus. **(b)** Short axis view of the mass (crossed sign) in close proximity to the brachial artery (asterisk) and median nerve (white arrowhead) at the level of the lower 1/2 of the humerus.

was referred to a plastic surgeon for excisional biopsy. After ultrasound-guided biopsy, the mass was resected by surgical excision, and histopathological examination of the mass confirmed the diagnosis of schwannoma. The patient experienced postoperative symptom relief.

Schwannomas are common benign tumors that originate from Schwann cells and constitute more than 90% of the peripheral neural tumors. The majority of these are related to the ulnar nerve and rarely emerge from the median nerve.[1] Although schwannomas are benign, definitive diagnosis and treatment require surgical excision.[2]

Peripheral nerve blockade and pulsed radiofrequency thermocoagulation are frequently used to treat

Submitted: 10.07.2023 Accepted: 10.08.2023 Available online: 08.01.2025

Correspondence: Dr. Damla Yürük. Etlik Şehir Hastanesi, Ağrı Kliniği, Ankara, Türkiye.
Phone: +90 - 531 - 993 23 78 **e-mail:** damlayuruk@hotmail.com

chronic pain. In recent years, ultrasound of the peripheral nerves has been proposed as a sensitive and inexpensive diagnostic aid for traumatic, neoplastic, infective, and compressive nerve injuries. In addition to confirming entrapment morphologically, ultrasound has the advantage of uncovering the underlying cause and guiding injections.[3] Pain specialists should be able to use ultrasonography for diagnostic purposes while performing interventional procedures under ultrasonography guidance.

Conflict-of-interest issues regarding the authorship or article: None declared.

Use of AI for Writing Assistance: Not declared.

Peer-rewiew: Externally peer-reviewed.

References

1. Knight DM, Birch R, Pringle J. Benign solitary schwannomas: A review of 234 cases. J Bone Joint Surg Br 2007;89:382-7. [CrossRef]
2. Farma JM, Porpiglia AS, Vo ET. Benign neurogenic tumors. Surg Clin North Am 2022;102:679-93. [CrossRef]
3. Greenfield AL, Parrikh M, Kanesa-Thasan R. Ultrasonographic evaluation of peripheral nerves: Technical considerations. Semin Musculoskelet Radiol 2022;26:105-13. [CrossRef]