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Diagnostic Challenge of an Ulnar Nerve Schwannoma Confused with a Lipoma

Lipom ile Karışan Ulnar Sinir Schwannomu

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Dear Editor,

Schwannomas are benign tumors that originate from Schwann cells. These benign tumors are easily mistaken for other entities such as lipomas, neurofibromas, hemangiomas, and synovial cysts (1,2). Here, we report a case of schwannoma of the ulnar nerve that was mistaken for a lipoma in a patient who had a history of lipoma, as surgically diagnosed. The purpose of this report was to emphasize the importance of appropriate diagnosis and management of peripheral sheath nerve tumors and highlight the role of imaging features in the suspicion of schwannomas.

A man aged 59 years presented with a five-year history of a slowly enlarging mass on his right distal forearm. The patient had a history of similar lesions on the right and left upper limbs that were diagnosed as lipoma through surgery. During the last six months, the mass had been associated with dull pain and discomfort. His initial neurologic examination revealed a minimally mobile 2x1-cm lesion on the ulnar aspect of the forearm associated with dull pain triggered by mild pressure. Hoffman-Tinel's sign was positive and there was minimal paresthesia over the 4th and 5th fingers of the right hand. An ultrasonography examination revealed an 8x15-mm, fusiform solid mass near the ulnar artery on the right distal forearm. The non-vascular mass was well-defined, homogeneous, isoechoic with the ulnar nerve, and had continuity with the ulnar nerve (Figure 1A, 1D). Magnetic resonance imaging revealed that the tumor was isointense to surrounding muscles on T1-weighted images, and hyperintense on T2-weighted images. Homogeneous contrast enhancement was observed (Figure 1B, 1E). A histopathologic examination established the diagnosis of classic schwannoma (Figure 1C, 1F).

Clinically, schwannomas are slow-growing tumors, sometimes associated with pain and paresthesia (3).

Ulnar nerve schwannoma cases have rarely been reported in the literature (4). Careful physical examination and imaging features raise the diagnostic suspicion of schwannomas, and histopathologic features are the mainstay for the definitive diagnosis of these tumors (5). When a clinician encounters a surface lesion that appears benign, peripheral nerve sheath tumors should be considered as a possible differential diagnosis.

Ethics

Informed Consent: Consent form was filled out by all participants.

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Authorship Contributions

Surgical and Medical Practices: T.K., Concept: S.Ö., Design: S.Ö., Data Collection or Processing: A.K., Analysis or Interpretation: Y.K., Literature Search: Y.K., Writing: S.Ö.

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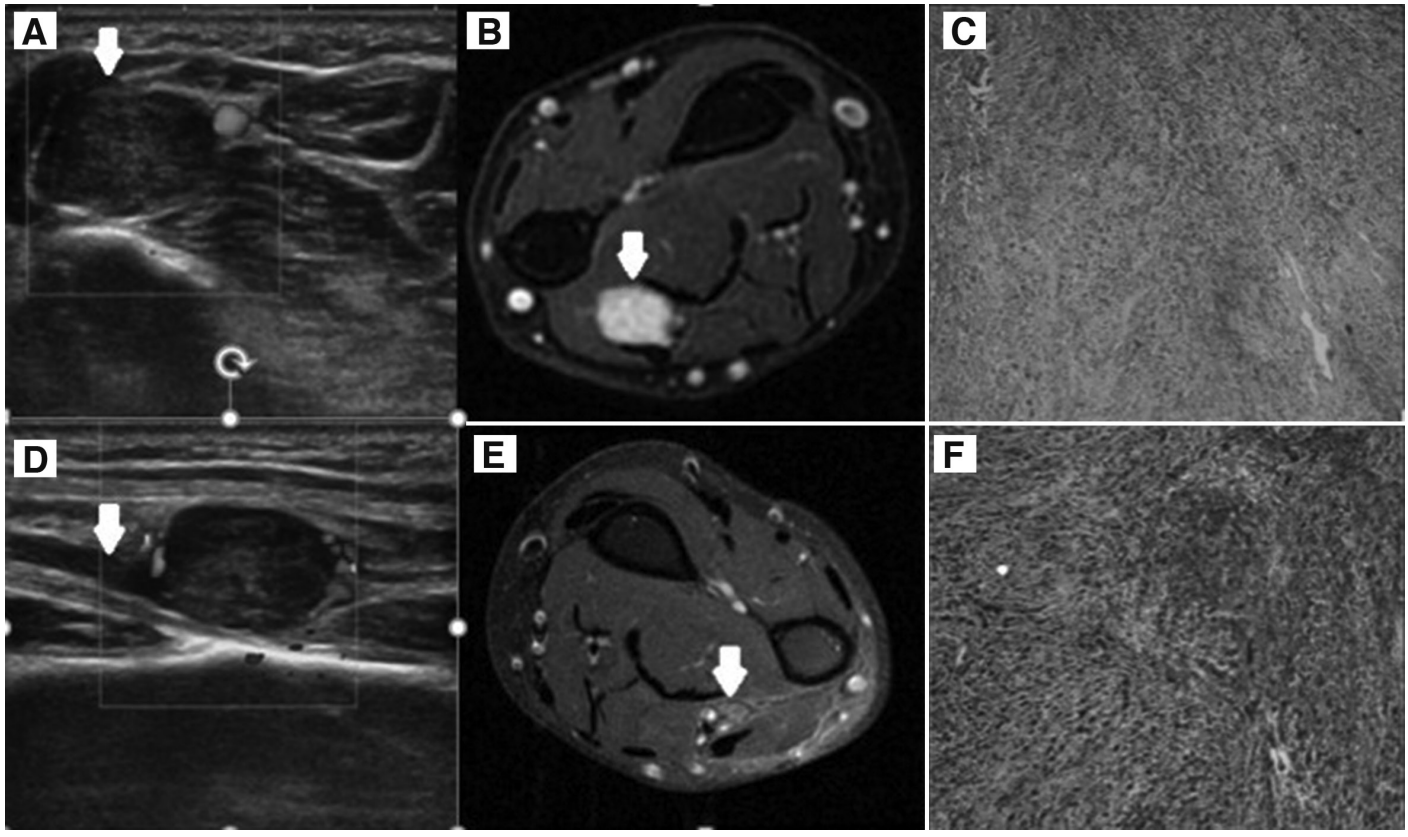

Figure 1. The round-shaped homogenous, isoechoic, non-vascular mass (arrow) was observed on color Doppler image (A). Homogenous contrast enhancement of the lesion (arrow) on axial T1-weighted images after contrast administration (B). Histopathologic image of the schwannoma, (hematoxylin&eosin stain) (C). The non-vascular mass (arrow) had continuity with and was isoechoic with the ulnar nerve (D). The normal ulnar nerve of the opposite side on a T1-weighted image (E). Histopathologic image of the schwannoma; common nuclear and cytoplasmic positivity for S-100 (F)

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