Solitary tuberculoid Hansen lesion of the ulnar nerve

Case illustration

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A case in which a large solitary tuberculoid Hansen granuloma arose from a small branch of the ulnar nerve without involving any other tissue is presented. This lesion is probably very rare, although one case has been reported in which there was an isolated, purely neural, tuberculoid Hansen lesion arising from the brachial cutaneous nerve with spontaneous drainage of abscess. This 14-year-old Indian girl, who had immigrated to the United States in March 1993, presented in June 1994 with a 2-month-long history of pain in the region of her right elbow. She had noticed a lump just proximal to the medial aspect of her right elbow and, at the same time, noticed some numbness and tingling along the distal half of the ulnar aspect of her right forearm and the ulnar distribution of her right hand. On applying pressure over this lump, she noticed some pain in the ulnar distribution of her right hand, mainly located in her right little finger. She denied any weakness of the intrinsic muscles of her right hand and had not noticed any change in her handwriting or difficulty in writing. She had been very healthy throughout her life and had not experienced any significant illness in the past.

Neurological examination was unremarkable. Examination of the patient’s right elbow and arm revealed a 1.5 × 2–in mass over the posteromedial aspect just above the right elbow, and a prominent right ulnar nerve in the ulnar groove. Pressure exerted over the lump produced some tingling and pain in the patient’s right little finger.

The mass seems to infiltrate adjacent tissue. Right: Coronal T₁-weighted multiplanar gradient-echo MR image displaying a heterogeneous signal above the medial epicondyle along the ulnar nerve, which appears quite cellular and seems to communicate with the joint space and to infiltrate adjacent soft tissue.

Fig. 1. Left: Coronal T₁-weighted MR image displaying a heterogeneous signal with areas of signal similar to that of muscle and other areas of lower signal. The mass extends from the posterior margin of the medial epicondyle proximally along the medial margin of the triceps muscle. The mass seems to infiltrate adjacent tissue.

With a differential diagnosis of myosarcoma, rhabdomyosarcoma, or synovial sarcoma based on the clinical factors and the MR images, the patient underwent surgery on June 27, 1994. Dissection was performed with the aid of an operating microscope. The mass appeared to be a pseudocapsule. The round spherical mass, 1.5 in in diameter, was dissected out and a small branch from the ulnar nerve, which entered into the mass and disappeared within it, had to be sacrificed. A small amount of cystic fluid and caseous material was found in the center; the remainder of the mass was solid. The cystic fluid, caseous material, and half of the spherical mass were submitted to the laboratory for acid-fast staining, including fluorochrome acid-fast staining and staining for fungi; all tests yielded nondiagnostic results. Tissue cultures prepared to detect tuberculosis and leprosy over the next 6 months produced no growth.

Histological examination revealed numerous granulomata, many of which were confluent with areas of caseation. A segment of nerve present in one specimen (Fig. 3) displayed an inflammatory process, mainly consisting of lymphocytes. The final diagnosis in this case was solitary tuberculoid Hansen lesion of the ulnar nerve. One could argue that this could be a sarcoïd granulomatous lesion. However, in leprosy granuloma the “histological involvement of peripheral nerves is pathognomonic, even in the absence of bacilli.” After nearly 6 years of follow-up review, I have not observed other stigmata of lepromatous lesion in this patient. It is presumed that removal of a solitary lesion such as this one results in cure.

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References


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