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What is This?



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Isolated intraneural schwannoma of the median nerve

Dear Sir,

A 40-year-old woman presented with synchronous masses over the volar aspect of her left wrist and the radial side of her middle finger (Figure 1). Both masses were tender to palpation. Typical signs and symptoms of median nerve compression were present, such as thenar atrophy, numbness in the median nerve distribution, a positive Tinel sign, and nocturnal pain. Electromyography demonstrated moderate median nerve compression at the wrist. Magnetic resonance imaging revealed a mass that was centrally located inside the median nerve in the distal one-third of the left forearm and another encapsulated lesion was seen arising from the radial digital nerve of the middle finger over the middle phalanx level. Surgical exploration showed encapsulated masses that were both compressing the nerve fibres centrally inside the perineural sheath. The proximal mass in the median nerve was removed completely (Figure 2). The digital nerve lesion required resection of a section of nerve and reconstruction with nerve grafting (Figure 3).

Histopathological assessment showed a diagnosis of schwannoma for both lesions.



Figure 1. Synchronous masses in both forearm and third finger.



Figure 2. Encapsulated mass of median nerve compressing to nerve.



Figure 3. Encapsulated mass of radial digital nerve of third finger.

Postoperatively the symptoms of carpal tunnel syndrome resolved rapidly, contrary to numbness at the radial side of the middle finger, which gradually improved after 4 months postoperatively with some resultant sensorial deficits.

Schwannomas or neurilemmomas are encapsulated lesions originating from schwann cells of the neural sheath. They are the most common tumours of the peripheral nerves (Aslam and Kerr, 2003). While most are solitary, multiple lesions, especially in the median nerve, have been reported (Lowenstein et al.,

2000). In patients with neurofibromatosis, schwannomas may be located centrally in the nerve trunk covered by the intact nerve fibres, which is contrary to the common eccentric location adjacent to a nerve (Fellegara and Bisceglia, 2008). This patient did not have evidence of neurofibromatosis.

This case report is an example of a rare presentation of multiple schwannomas centrally located inside a peripheral nerve trunk, but not associated with neurofibromatosis.

Conflict of interests

None declared.

References

Aslam N, Kerr G. Multiple schwannomas of the median nerve: a case report and literature review. Hand Surg. 2003, 8: 249–52.

Fellegara G, Bisceglia M. Intraneural schwannoma. Int J Surg Pathol. 2008, 16: 57–8.

Lowenstein J, Chandnani V, Tomaino MM. Fibrolipoma of the median nerve: a case report and review of the literature. Am J Orthop (Belle Mead NJ). 2000, 29: 797–8.

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