

Guyon's Canal And Carpal Tunnel Syndrome Due To Lipoma: Case Report

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INTRODUCTION:

The Guyon's canal and carpal tunnel are common sites for ulna and median nerve compressive neuropathy at the wrist. Various anatomic variations or space-occupying lesions may cause the compression. Lipoma is a benign soft tissue tumor and rarely causes nerve compression. We report two cases of simultaneous Guyon's canal and carpal tunnel syndrome due to lipoma.

CASE REPORT:

Our first patient is a 30-year-old male, right-hand dominant, complaining of worsening right-hand numbness and clumsiness for a year. Clinical examination confirmed the diagnosis of both carpal and ulna tunnel syndrome. The second patient was a 35-year-old lady working in the office who came with similar symptoms on her dominant left hand but with more pronounced muscle wasting of her hand and severe night pain. Both patients underwent surgical release of both carpal and ulna tunnel with single curvilinear incision along hook of hamate. Surgical exploration revealed an abnormal amount of fat tissue at the subcutaneous level, later confirmed as lipoma.

Post-operative, both patients showed drastic improvement in symptoms.

DISCUSSION

Lipoma is a common well-encapsulated benign soft tissue tumor; the non-encapsulated lipoma is associated with older age. In both our cases, the lipoma was not encapsulated. Histopathology demonstrated matured adipose tissue consistent with lipoma. Besides that, we believe both carpal and ulnar tunnel were further compromised with thickened palmar aponeurosis, transverse carpal ligament, and aberrant palmaris brevis muscle, which are present in both cases.

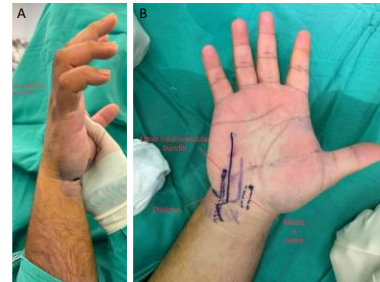


Figure 1: (A)Ulna Clawing and (B) skin marking for incision (patient 1)

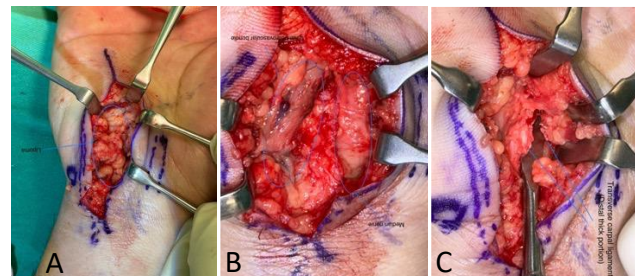


Figure 2: (A) lipoma tissue, (B) ulna neurovascular bundle and median nerve, (C) thick palmar aponeurosis

CONCLUSION:

Subcutaneous lipoma alone may not be cause of nerve compression at wrist, but in combination with other anatomic variation, the narrowing of the ulna and carpal canals can be significant. A high index of suspicious and vigilant release of this structure ensures a complete release and alleviate nerve compression at wrist.

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