

Nontraumatic Neuroma in Continuity of Median Nerve: A Case Report

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INTRODUCTION:

A neuroma is a mass of misdirected axons entrapped within connective tissue [1]. A neuroma-in-continuity (NIC) is a neuroma resulting from a nerve injury in which internal neuronal elements are partially disrupted while the epineurium typically remains intact [1]. The severed nerve may continue to enlarge, forming a tumoral growth called neuroma, while the distal nerve segment undergoes Wallerian degeneration [2].

REPORT:

Presenting 28-year-old female with no history of trauma, developed paresthesia of bilateral hand, worse over right hand. She works as a technician, complains of worsening symptoms during prolonged heavy duty. After physical examination, a positive Tinel sign and palpable swelling were noted. Cervical myelopathy has been ruled out. Despite underwent a series of physiotherapy, her symptoms did not improve.

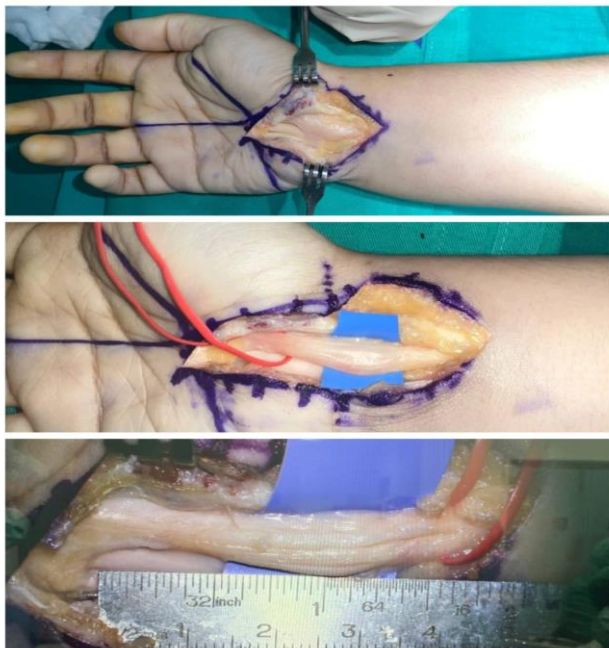


Figure 1: Extended carpal tunnel release with tumour like swelling arises from median nerve. Few nerve fibers appeared swollen with some fatty tissue.

She has undergone right extended carpal tunnel release, internal neurolysis done, histopathology shows neuroma-in-continuity. Post operatively, patient's symptoms markedly improved after 3 months and currently is still under follow-up for continuation of physiotherapy.

CONCLUSION:

Atraumatic peripheral nerve neuromas are uncommon. The non-surgical approach includes pain management, physical therapies, neurorehabilitation, psychological support, and neuromodulation, such as pregabalin and gabapentin [2]. Neuromas-in-continuity are challenging to treat as the neuroma needs to be dissected from nervous tissue that must remain functional [3]. Ultrasound and MRI are incredibly helpful in the assessment of peripheral nerve disorders [4]. Detailed imaging should be done if any nerve swelling is suspected as it may show localised neural swelling and/or neural fascicular entwinement and/or hourglass constriction. These features will aid in preoperative planning and surgical exploration is necessary if no significant neurologic and electrophysiologic recovery after attempted non-surgical approach.

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