

DOUBLE CRUSH SYNDROME: SYRINGOMYELIA AND CUBITAL TUNNEL SYNDROME - WHICH IS THE TRUE CULPRIT?

Mohd Daniel Djamalludin¹, Tunku Sara Tunku Ahmad Yahaya¹

¹University Malaya Medical Center

Introduction: Ulnar nerve entrapment is the second most common compressive neuropathy after carpal tunnel syndrome. Syringomyelia, which is a rare chronic spinal cord disorder, has been reported to present as mononeuropathy with failure of surgical intervention like carpal tunnel or cubital tunnel release. This is an example of a masquerader which lead to wrong diagnosis and treatment.

Discussion: A 52-year-old right-handed female teacher presented with a complaint of paraesthesia of the left hand for two years. She underwent left carpal tunnel release one year ago at the different institution but obtained no relief. Examination at our institution showed intrinsic muscles wasting of the hand, ulna claw, and reduced sensation over C5 to T1 dermatome. Deep tendon reflexes were hyporeflexic throughout the left upper limb. Nerve conduction studies (NCS) revealed markedly reduced amplitude of the left ulna (ADM) compound muscle action potential (CMAP) and absence of the left ulna sensory nerve action potential (SNAP), suggestive of compression at the elbow region. MRI of the cervical and thoracic spine revealed cervical and thoracic syringomyelia without Chiari malformation and no evidence of nerve root compression. She underwent left cubital tunnel release. Intraoperatively marked compression of the left ulnar nerve was noted. Postoperatively, paraesthesia did improve.

Conclusion: A thorough discussion with the patient is essential regarding the aim of treatment. Prognosis is already poor when atrophy or denervation has been present for more than one year with lack of SNAP from the electrodiagnostic study. The patient presented with atypical features of a common disorder, but with a careful history, physical examination, and directed investigation led to appropriate treatment. Clinicians should keep in mind that such diagnoses should be considered when the patients have atypical features and respond poorly to treatment.