

Ulnar Neuropathy associated with Snapping Triceps – a case report –

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INTRODUCTION

Instability of the ulnar nerve is rare and should be well characterized before any therapeutic attitude. Triceps medial portion snapping over the medial epicondyle of the humerus is also uncommon and is one of the possible causes of recurrent trauma of the cubital nerve and consequently ulnar neuropathy.

CASE REPORT

A 30-year-old female, with no history of trauma, presents with pain in the medial aspect of the left elbow, that worsens with flexion. These complaints begun 2 years before and have worsened progressively, with dysesthesia of the 4th and 5th fingers. Objectively, she had two distinct snappings on the medial aspect of the elbow and a positive ulnar Tinel sign at the elbow, with no muscle atrophy.

An ultrasound performed during elbow flexion showed a subluxation of the ulnar nerve at 80° and of the triceps tendon at 90° [Fig. 1 and 2]. Electromyography revealed an ulnar neuropathy at the elbow level. MRI showed local oedema with no associated injuries [Fig. 3 to 6].

Intra-operatively, we confirmed the image findings [Fig 8 and 9].

We released and performed a subcutaneous anterior transposition of the ulnar nerve as well as a reduction plasty of the myotendinous region of the triceps. At the end of the surgery, there was no snapping present on the medial aspect of the elbow [Fig. 10].

At 24 months follow-up, the patient is asymptomatic with full functional recovery

DISCUSSION/CONCLUSION

Snapping on the medial elbow on a patient with ulnar neuropathy might not be caused exclusively by the subluxation of the ulnar nerve. An unrecognized Triceps Snapping may result in a failed treatment.

There are some anatomical variations that may be associated with it such as an abnormal triceps insertion in the olecranon, the presence of an accessory tendon, morphologic alteration of the medial epicondyle (congenital or post-traumatic) and cubitus varus.

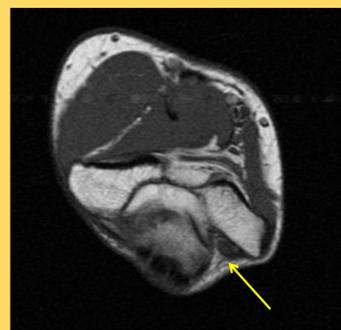
Asymptomatic patients generally do not require treatment. Constant pain resistant to conservative measures and those with associated ulnar neuropathy require surgical treatment,

In cases like this, the dynamic ultrasound may be particularly useful. MRI is also important to characterize the nerve trajectory and exclude structural pathology undetected by other means.

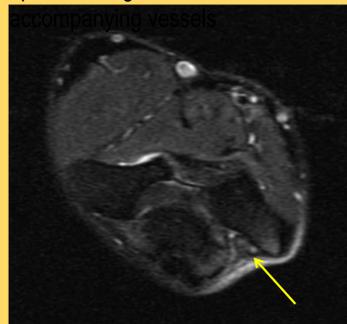
Elbow in Extension



1 – Ultrasound – Ulnar nerve in the epitrochlear gutter



3 – MRI T1 – Ulnar nerve in the epitrochlear gutter with



5 – MRI DP FATSAT – Ulnar nerve in the epitrochlear gutter with accompanying vessels

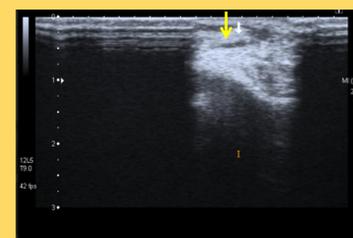


7 – Surgical approach



9 – Ulnar nerve in the epitrochlear gutter

Elbow in 90° Flexion



2 – Ultrasound – Ulnar nerve - anterior dislocation



4 – MRI T1 – Ulnar nerve outside the epitrochlear gutter with medial triceps



6 – MRI DP FATSAT – Ulnar nerve outside the epitrochlear gutter with medial triceps



8 – Ulnar nerve outside the epitrochlear gutter + Snapping medial triceps



10 – Ulnar nerve [anterior transposition] + reduction plasty of the myotendinous region of the triceps

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3. Dreyfuss U, Kessler I.: Snapping elbow due to dislocation of the medial head of the triceps. A report of two cases. *J Bone Joint Surg Am* (60): 56-7, 1978.