

# Cubital Tunnel Syndrome Secondary To Anconeus Epitrochlearis Muscle

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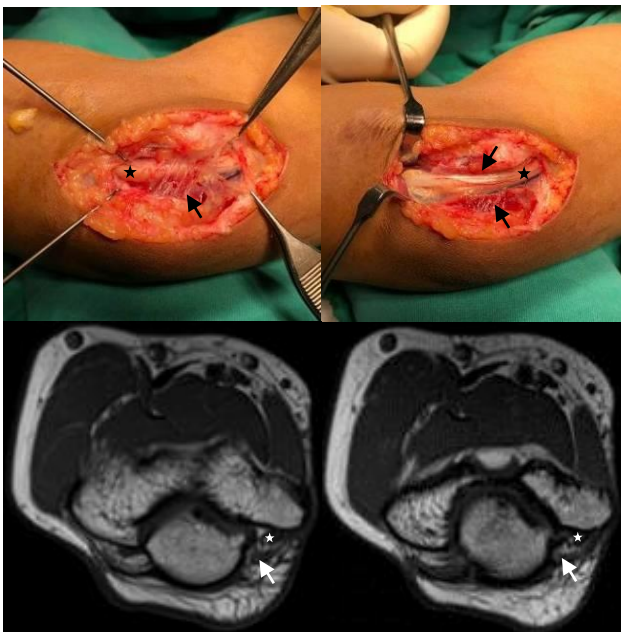
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## INTRODUCTION:

Cubital tunnel syndrome (CuTS) is the second most common compressive neuropathy; however, compression that causes by anconeus epitrochlearis muscle (AEM) is uncommon.[1] We reported a case of CuTS that caused by hypertrophy of AE muscle in a javelin thrower.

## REPORT:

An 18 years old athlete (javelin thrower) with right hand dominant presented with the medial side of right elbow pain for 2 years associated with progressive numbness at ulnar nerve distribution. Magnetic resonance imaging (MRI) of right elbow showed the presence of AEM and no evidence of ulnar collateral ligament injury and medial epicondylitis. Patient was treated as CuTS secondary to AEM compression and proceeds with cubital tunnel release. Intra-operatively, there is AEM that covering the cubital tunnel and causing compression effect. Post AEM release noted the ulnar nerve has hourglass appearance and pale distal to AEM border and flexor carpi ulnaris fascia. The patient recovered well post-operatively.



**Figure 1: : Intra-operative and MRI finding**

→ : AEM; ★ : ulnar nerve.

## DISCUSSIONS:

AEM is considered an anomalous muscle originates from the inferior region of the medial epicondyle, inserting posteromedially on the olecranon. Prevalence of AE is about 13.6%, and excessive overhead activity involving dominant hand was the cause of AEM hypertrophy.[1,2] Our patient presentation was classical as overhead movement is vital for a javelin thrower. Literature suggested that AEM decreases the rigidity of the entrance into the cubital tunnel; thus, protects from developing CuTS. However, many studies agree with AEM hypertrophy lead to CuTS. Surgical treatment by AEM excision with ulnar nerve anterior transposition is considered effective treatment. Future studies should address the ideal treatment for CuTS cause by AEM.[1,2]

## CONCLUSION:

CuTS cause by AEM hypertrophy is rare. The diagnosis can be made with a good history, clinical examination, and MRI.

## REFERENCES:

1. Park IJ, Kim HM, Lee JY, et al. Cubital Tunnel Syndrome Caused by Anconeus Epitrochlearis Muscle. J Korean Neurosurg Soc. 2018;61(5):618-624.
2. Maslow JI, Johnson DJ, Block JJ, Lee DH, Desai MJ. Prevalence and Clinical Manifestations of the Anconeus Epitrochlearis and Cubital Tunnel Syndrome. Hand. 2018;155894471878941.