Cubitus valgus deformity with tardy ulnar nerve palsy

PRESENTATOR –DR A. NARASIMHA,
MODERATOR-DR P.ANIL BABU(MS ORTHO professor and hod department of orthopaedics.

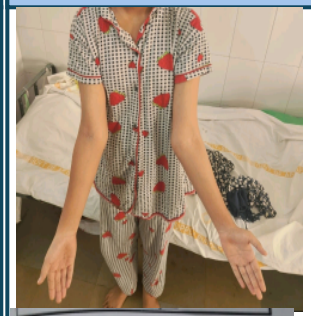
INTRODUCTION

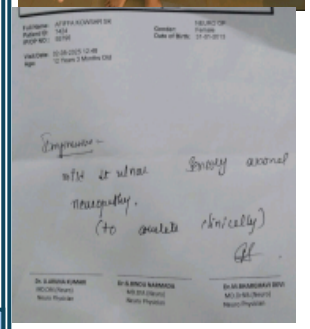
Tardy ulnar nerve palsy is a chronic clinical condition characterizedby a delayed onset ulnar neuropathy after an injury to the elbow.Typically, tardy ulnar nerve palsy occurs as a consequence of nonunion of pediatric lateral condyle fractures at the elbow, which eventually lead to a cubitus valgus deformity. While the child grows,the deformity worsens and the ulnar nerve is gradually stretched untilclassic symptoms of ulnar nerve neuropathy appear

CASE REPORT

A 12 year old female came with complaint of decreased sensation in the left hand 4th and 5th fingers since 3 months ,
She has history of lateral epicondyle fracture 8 years ago for which k wire fixation was done,
On examination-cubitis valgus deformity was seen in left elbow
Clawing of ring and little finger
Positive Froment's sign
Wasting of interossei muscles

OPERATIVE FINDINGS





Operative Procedure
Medial closed wedge osteotomy with Anterior transposition of ulnar nerve and plating

Result
Surgical decompression and anterior transposition of the ulnar nerve resulted in significant sensory and motor improvement with good functional recovery and no recurrence of symptoms

DISCUSSION

Tardy ulnar nerve palsy is characterised by late onset ulnar neuropathy. Hunt coined the term ' Tardy Ulnar Nerve Palsy ' to the late presenting ulnar nerve paralysis. Ulnar nerve originates from the medial cord of brachial plexus with nerve roots C8 & T1. At elbow it is posterior to the medial epicondyle of the humerus passed through cubital tunnel. The ulnar nerve is palpable and vulnerable to injury at the medial epicondyle of humerus because of it peripheral location and proximity to elbow joint. When there was an anatomical disturbance of the elbow joint, then it causes stretching of the ulnar nerve, if it is continuous further without any intervention then finally it developed as ulnar nerve palsy.

CONCLUSION

Tardy ulnar nerve palsy secondary to cubitus valgus deformity shows favorable results with timely surgical treatment.
Anterior transposition of the ulnar nerve provides reliable symptomatic and functional improvement.
Delay in intervention may compromise complete motor recovery.