

WIDE RESECTION OF DISTAL ULNA GCT AND STABILIZATION OF ULNAR STUMP BY ECU TENDON

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Introduction: GCT of the distal ulna is extremely rare, accounting for approximately 0.45 - 3.2%¹. Management includes wide local resection of the tumor, with or without stabilization or reconstruction of the ulnar stump.

Discussion: A 27 year-old lady, underlying right distal ulnar GCT confirmed by curopsy done one year ago, complained of intermittent right wrist pain and swelling for 2 months. She had no constitutional symptoms and denied family history of cancer. Examination revealed hard swelling measuring 6cmx3cm at the distal ulna with limited pronation and supination. Wrist radiographs revealed expansile, lytic lesion at the distal ulna with cortical destruction. She had recurrent right ulnar GCT and underwent excision of the distal ulna and stabilization of ulnar stump with ECU tendon. She recovered well post-operatively with good wrist function. Various methods of reconstruction or stabilization were reported following wide excisions of the distal ulna for primary osseous tumors: tendon stabilization, distal ulnar autograft or allograft, plate arthrodesis and segmental bone transport. Stabilization by ECU tendon is frequently used and reported. Kayias et al. first applied this technique in GCT of ulna. The ECU tendon was identified and divided into radial and ulna half after excision of GCT. The ulna half of ECU tendon was looped through a 3mm drill hole over the ulna stump in a supinated forearm. The free end of the ECU was then sutured around the ECU tendon using Prolene suture. Therefore, a cuff of tendon was created over the ulnar stump for stabilization . Without stabilization, the stump will displace dorsally during pronation and converge towards the radius, leading to handgrip weakness, persistent pain, rupture of the extensor tendons and limitation of forearm rotation.

Conclusion: Management of distal ulnar GCT depends on: wide excision and stabilization of ulnar stump with ECU tendon to achieve good functional outcome.