

Anterolateral approach, an effortless method for radial nerve exploration.

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INTRODUCTION:

Holstein Lewis fractures simple spiral fracture of the distal third of the shaft of humerus. It has an incidence of 7.5% of all shaft fractures which has an increased risk of acute radial nerve palsy of 22% compared to 8% from other shaft fractures¹. High association with radial nerve palsy was that the fracture occurred at the site of radial nerve runs through the lateral intermuscular septum in direct contact with the bone and with limited mobility².

REPORT:

We report a 23-year-old female presented after a motor vehicle accident with an open right midshaft humerus. Examination revealed a puncture wound over the anterior arm, with a wrist drop. X-ray showed transverse fracture of right shaft humerus and we proceeded with debridement and radial nerve exploration and plating. We used an anterolateral approach to reach the fracture site without difficulty as the patient was in a supine position with the arm on a board, and the radial nerve was easily identified. Radial nerve was interposed in between the fracture fragment however it is in continuity.

Exploring the radial nerve as it is 14 cm from the lateral epicondyle after coursing along the spiral groove was much easier using an anterolateral approach as we could trace the nerve distally and laterally towards the spiral groove and fracture site where it is commonly injured in high radial nerve injuries. It is also reportedly the safest approach compared to posterior and lateral approaches respectively³.

Anterolateral approach is an effortless and safe method to explore the radial nerve in humerus fractures.



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Figure 1: Isolated radial nerve at midshaft humerus

CONCLUSION: