

A Rare Buttonhole: A Case Report

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INTRODUCTION:

Elbow dislocations are the second most common major joint dislocation after shoulder dislocations. Over 90% of elbow injuries are posterior dislocations. Complex elbow dislocations with radial head piercing the capsule or lateral collateral ligament has been reported. However, it is rare that the humerus buttonholes through the triceps muscle. We present an anterior elbow dislocation with medial epicondyle fracture complicated with humerus buttonholed into the triceps muscle and how it was managed.

CASE REPORT:

A 16 years old boy fell on his outstretched arm. He sustained a right elbow dislocation, and although a closed reduction under sedation was attempted twice, proved unsuccessful. Preoperatively the distal humerus was palpable posteriorly. An open reduction through a posterior approach was performed, with screw fixation of the medial epicondyle. Intraoperatively we noted the humerus had buttonholed through the triceps muscle, and the capsule was torn. Stable reduction was achieved after release from the muscle and joint capsule repair. Postoperatively the elbow was stable, with no neurovascular injury.

DISCUSSION:

Anterior dislocations of the elbow are rare. In most reports, anterior dislocation of the elbow was associated with fractures around the elbow, and associated neurovascular injury¹. Closed reductions failed due to intra-articular displacement of fractures, interposition of the lateral collateral ligament and part of the anterior capsule into the joint, or blocks from osteochondral fragments². Another frequent cause is a buttonhole, where the radial head goes through the capsule or lateral collateral ligament³⁻⁵. Most of the irreducible cases reported were due to a buttonhole of the radial head, or mechanical blocks due to fractures of medial epicondyle, radial head, capitella, and less commonly, lateral epicondyle². Therefore,

anterior elbow dislocation with humerus button hole is extremely rare, with limited literature on this condition. On choice of surgical approach, although in the literature the Speed and Boyd's approach is used for posterior dislocations, and a lateral approach for anterior dislocations⁶⁻⁷, we used a posterior approach for an anterior dislocation for our patient based on the initial examination.

CONCLUSION:

Irreducible anterior elbow dislocations with humerus buttonholed through triceps muscle is rare. Careful examination and discussion during the decision making process is mandatory for a good outcome.

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