

## Unstable Elbow Dislocation: Lateral Ulnar Collateral Ligament Injury Of The Elbow

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### INTRODUCTION:

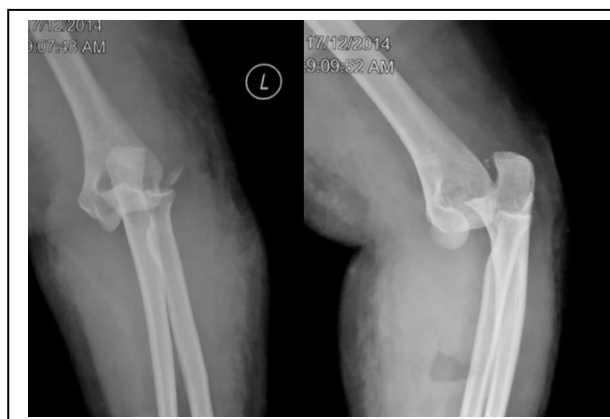
An unstable elbow dislocation is a complex injury and is associated with an injury to the capsule-ligamentous structures. The most commonly injured structure is the lateral ulnar collateral ligament and it may be a pure ligamentous injury or associated with an avulsion fracture that necessitate an open reduction.

### MATERIALS & METHODS:

Our patient is a 31 years old lady who was involved in a road traffic accident and sustained an unstable left elbow dislocation with an avulsion fracture of the lateral epicondyle of the left humerus. A closed reduction was initially attempted to reduce the elbow but failed.

### RESULTS:

We proceeded with an open reduction of the left elbow and repair of the avulsed lateral epicondyle fragment with an anchor suture (Piton™, Tornier). It was complicated with an arthrofibrosis which was treated with an arthroscopic adhesiolysis and after a year the elbow motion was fair and she was back to work as an administrative clerk.



**Figure 1 – Preoperative left elbow x-rays showing a dislocated left elbow joint with associated avulsion fracture of the lateral epicondyle of humerus**



**Figure 2 – Postoperative x-rays showing a congruent reduction with a properly placed anchor suture**

### DISCUSSIONS:

In an elbow dislocation, the lateral ligamentous complex is more commonly injured than the medial side and is usually due to a proximal avulsion injury. In an avulsion injury, open reduction of the dislocation is advocated with a direct fixation or repair of the avulsed ligament. Post-operatively patient should be initiated with early active motion physiotherapy to avoid complication of elbow stiffness.

### CONCLUSION:

A capsule-ligamentous injury should be suspected in an unstable elbow dislocation and the managing team should be able to proceed with an open reduction and repair of the injury to achieve a satisfactory outcome.

### REFERENCES:

1. Englert et al, Elbow Dislocations: A Review Ranging From Soft Tissue Injuries to Complex Elbow Fracture Dislocations, 2013, Advances in Orthopaedics, Hindawi Publishing Corporation, Article ID 951397
2. Zeiders et al, Management of Unstable Elbows Following Complex Fracture-Dislocations the “Terrible Triad” Injury, 2008, J Bone Joint Surg Am, 90:75-84