

Primary Ligament Repair In Unstable Simple Elbow Dislocation

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INTRODUCTION:

Elbow dislocation is the second most common dislocation in adults. It can be classified into simple or complex dislocation based on the presence of fracture. Simple elbow dislocation can be divided into stable and unstable.

REPORT:

This is a case of young lady alleged with motor vehicle accident sustained closed simple elbow posterior dislocation. Close manual reduction with immobilization was done. X-ray post reduction shows that the elbow joint is still not reduced. She underwent close manual reduction with application of across elbow fixator to stabilize the dislocation. However, the joint is still subluxated. Open reduction with repair of the lateral collateral ligament was performed. Post-operatively, the elbow joint is reduced and stable after repair of the ligament.



Figure 1: X-ray of elbow after close manual reduction.

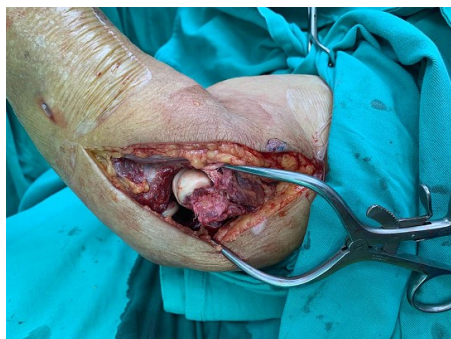


Figure 2: Intra-operative finding of dislocated radiocapitular joint with rupture of the lateral collateral ligament.



Figure 3: X-ray of elbow after surgery.

DISCUSSIONS:

Simple elbow dislocation is the elbow dislocation without a fracture to the distal humerus, proximal ulna and proximal radius. Most of the simple elbow dislocation is stable which need only reduction of the joint and immobilization. In unstable simple elbow dislocation, at least one of the ligaments may be ruptured causing the instability to the joint. One of the study shows that 80% of lateral collateral ligament(LCL) and 55% of medial collateral ligament(MCL) was avulsed in unstable simple elbow dislocation. Primary surgical repair of collateral ligaments is important to achieve stability of the elbow joint. Most of these joint becomes stable after repair of the LCL alone. In some cases, additional MCL repair is required to achieve stability after restoration of the LCL.

CONCLUSION:

Unstable simple elbow dislocation requires surgical repair of the collateral ligament to achieve congruent and stable joint.

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