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Acute Medial Clavicle Fracture

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INTRODUCTION:

Medial clavicle fractures are uncommon injuries, accounting for 2–3% of all clavicle fractures. Most medial clavicle fractures have traditionally been treated conservatively. Operative treatment of these fracture is usually considered for open injuries, and fractures with neurovascular compromise or overlying skin compromise. Two types of medial fracture dislocation of the clavicle are described anterior and posterior according to the direction of the displacement of the fractured clavicle in relation to the sternum.

REPORT:

A 38 year old malay male involved in a motor vehicle accident complained of right shoulder and neck pain post trauma. He was a motorbike rider and was hit by an oncoming car in opposite direction. X-rays were performed and revealed a right posterior displaced medial clavicle fracture, with no compression of the underlying neurovascular or airway structures. Due to these findings, it was determined that he would require surgery for an open reduction an internal fixation of the right medial clavicle fracture. Internal fixation with an locking plate. The reduction and stability of the fracture were confirmed at the end of the procedure with X-ray image intensifier. The patient was immobilized with armsling. Passive wrist and elbow range of motion and pendulum exercises of the shoulder were allowed. Passive range of motion of the shoulder was allowed after the first month, and active motion exercises were progressively introduced. Patient was discharged well with No major or minor complications were registered.

Figure 1: Pre Operative Xray

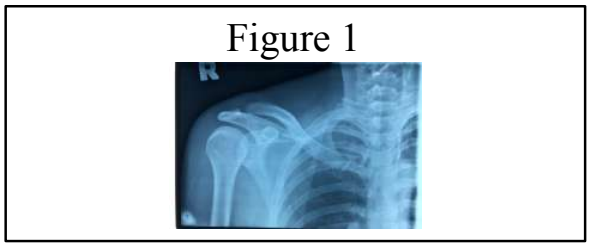
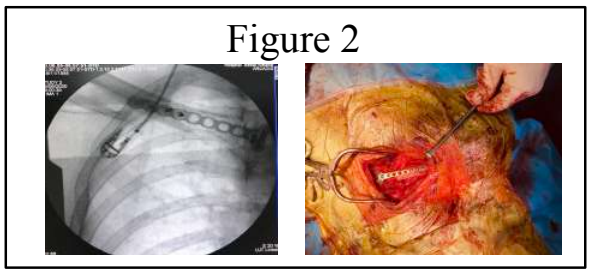


Figure 2: Post Operative Xray



CONCLUSION:

The process of decision-making on surgical management of medial clavicle fracture can be complicated due to lack of consensus on the indications, and also a potentially challenging nature of surgery. Proximity to vital structures increases the potential risk of catastrophic intraoperative complication. Furthermore, the small size of the medial fragment makes it difficult to achieve adequate fixation. Staying anterior and superior to clavicle during surgery, and use of unicortical locking screws in the medial fragment, can reduce risk of intraoperative adverse events.

REFERENCES:

1. Low AK, Duckworth DG, Bokor DJ (2008) Operative outcome of displaced medial-end clavicle fractures in adults. J Shoulder Elbow Surg 17 Pg 751-754.