

Fracture Dislocation of Shoulder

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ABSTRACT

Simultaneous dislocation of shoulder with fracture of the ipsilateral humerus is extremely rare and very little reported in the literature. We report a case of forty three year old man who got right shoulder dislocation with proximal humerus fracture. The patient was treated with open reduction and internal fixation by three 4.5mm screws. The operation went uneventful and has good range of motion of the shoulder after six months of follow up.

Keywords: shoulder dislocation, humerus fracture, open reduction

INTRODUCTION

Dislocation of the shoulder with ipsilateral proximal humerus fracture is extremely rare. It usually occurs as a result of a major trauma and a serious injury but not every orthopaedic surgeon has the opportunity to observe this rare case.¹ These injuries often occur as a result of high energy trauma and accidents. The literature also showed little cases with not adequate follow up results. Here we report a case of 43 year old man with anterior dislocation and proximal humerus three parts fracture.

CASE REPORT

A forty three year old man fell down from height on outstretch hand and got injury on his right shoulder and elbow region. He was seen in a local hospital three weeks back and referred to higher center.

On arrival to us he was conscious, alert and his right shoulder was swollen, range of motion (ROM) was restricted, tendered. The elbow also tendered, swollen but the ROM was full. No open wound was present and the distal neurovascular status was intact. X-ray of the shoulder and elbow taken which showed anterior dislocation of right shoulder with three parts fractures of the proximal humerus (Figure 1). X-ray of the elbow had only soft tissue injury. Open reduction

and internal fixation by three 4.5mm cortical and cancellous screws were done through delto-pectoral approach and the shoulder capsule also repaired. The shoulder joint reduction was confirmed under c-arm intra-operatively and by x-ray post-operatively (Figure 2). The operation went uneventful and the bone united at about three months' time radiologically. Six months after operation the range of motion of the shoulder was almost full with some pain on the shoulder.

DISCUSSION

The anterior dislocation of the shoulder and fracture of humerus are commonly encountered problems but simultaneous occurrence of them is extremely rare and such that all the reports in the literature are restricted to case reports only by various authors^{2,3,4,5} and these literature only reports humerus shaft fracture with dislocation. Flint⁶ reported dislocation of the shoulder with three parts proximal humerus fracture and shaft of humerus fracture.

In the reported cases, the injuries were caused by high velocity collisions with motorcycles or automobiles, falls from an elevation of greater than two meters or machinery accidents. These authors propose a specific posture in which these incidents occur, namely a flexed elbow with slight abduction of the shoulder. Whether the dislocation and fracture occur simultaneously or subsequently is also very much

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debated. Some authors have proposed that with injuries involving high velocity trauma, the axial loading force leads to the transfer of energy to the shaft of the humerus and into the shoulder, resulting in these simultaneous injuries.^{7,8}



Figure 1. Pre-Operative XRay



Figure 2. Post-Operative XRay

Some literatures reported management of fracture with fixation by plates and screws and then do closed or open

reduction for dislocation.^{3,4,5} Karimi-Nasab² reported management of fracture and dislocation conservatively. Flint⁶ reported the conservatively managed for the case of dislocation with three parts proximal humerus fracture with shaft of humerus fracture. Our case presented to us three weeks after the injury and need to go for surgery. Post-operative event went smoothly and after six months of operation the result was satisfactory. But the possible complications are stiff shoulder, recurrent dislocation, early degenerative changes and avascular necrosis of the humeral head.

CONCLUSION

Fracture dislocation of the humerus is rare and a challenging task. It is not possible to treat this patient conservatively as he presented three weeks after the injury. Six months after operation the result was satisfactory and long term follow up needed to rule out possible complications.

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