

Case Report: Atypical Floating Shoulder Injury With Fixation Through Judet Posterior Approach

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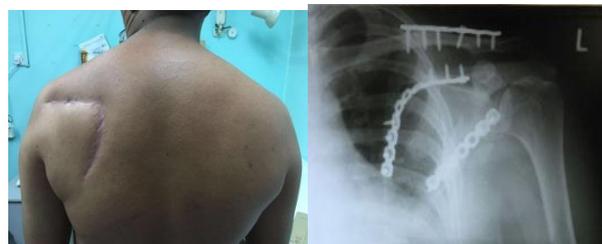
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INTRODUCTION:

Floating shoulder is a rare high energy injury which accounts for 0.4-1.0% of all fractures. 80-95% is associated with other traumatic injuries. Brachial plexus injury occur in 5-13% of scapula fracture and would significantly affect clinical outcome.

CASE PRESENTATION:

A 40 year old gentleman was admitted after motor vehicle collision complaining of left sided chest pain and shoulder pain with inability to move shoulder associated with shortness of breath. On examination, left sided shoulder swelling was noted. Neurology of left upper limb is normal. Pulses were equally strong and palpable bilaterally. Palpation of chest revealed subcutaneous crepitus with tenderness over anterior chest wall. Chest radiograph showed left sided pneumothorax with fractures of left third to eight ribs. Shoulder anteroposterior radiograph showed fracture of lateral third of left clavicle and comminuted fracture of base of glenoid neck extending to body of left scapula. A chest tube was inserted to left chest in view of left pneumothorax. Open reduction and internal fixation of left clavicle and left scapula was performed through Judet posterior approach. Rupture of coracoclavicular ligament was found during operation. Fixation is stable and early mobilization is started. Passive flexion and abduction of left shoulder was 0-160 degree with full adduction at 2 months after surgery with early return to work.



DISCUSSIONS:

Historically scapula body fracture is treated nonoperatively. Current literature suggests operative fixation is needed for certain types of fracture. The indication of operative fixation for this patient is due to double disruption of shoulder superior suspensory complex (SSSC). This complex is a ring of bone and soft tissue supported by two bony struts which connect the upper limb to the axial skeleton. The ring consists of glenoid, coracoid, acromion, coraco-clavicular ligament and acromioclavicular ligament. Superior bony strut is middle third of clavicle and inferior strut is lateral border of scapula body. Double disruption of this complex is associated with instability and fracture displacement can result in malunion or non-union. The Judet posterior approach gives excellent exposure of the infraspinatus fossa. Disadvantage include atrophy of infraspinatus muscle due to excessive mobilization or injury to suprascapular nerve.

CONCLUSION:

Stable anatomical reduction of both clavicle and scapula fracture gives early recovery and return to work.

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