Concomitant Floating Shoulder and Multiple Rib Fracture Fixation Allowing Early Rehabilitation

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INTRODUCTION:

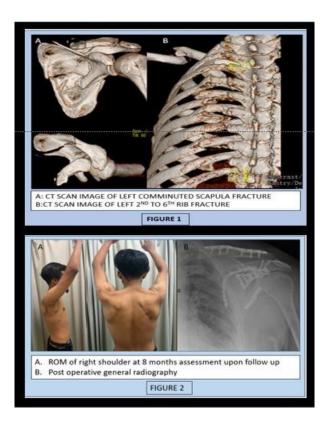
Ipsilateral clavicle, scapula and rib fractures are usually obtained concomitantly. The injury usually disrupts the stability of the shoulder joint and the chest wall causing multiple complication. Thus we present a case of concomitant clavicle, scapular and rib fracture treated surgically allowing early rehabilitation.

REPORT:

A 41 years old gentleman involved in MVA, sustained ipsilateral left clavicle, scapula and 2nd-4th subscapular rib fracture. General radiography imaging and CT scan images obtained, Patient underwent open reduction and plating of the clavicle, scapula and 3rd-5th rib fracture. Patient was positioned in semi recumbent position, the clavicle fracture was plated first, subsequently patient's shoulder was repositioned. Brodsky approach used for lateral border of scapula and posterior rib approach used to fix the medial scapula border and the targeted subscapular rib fractures. operatively, patient showed no sign of infraspinatus hypotrophy, external rotation strength preserved, modified medial border scapula approach allowed the fixation of scapula and subscapular ribs thus faster post operative rehabilitation. At follow examination patient had active examination and radiological assessment shows, united rib fracture without malunion, no complaints of intercostal neuralgia, infection was seen. The injured shoulder returned to at least 90% of the contralateral side range when assessed using the upper limb disability scoring.

DISCUSSION:

The combination of multiple rib and clavicle fracture results to decreased in stability, compliance and respiratory support of chest wall. Fixation of the clavicle, rib and scapula can provide additional stability to chest wall improving clinical outcome and early rehabilitation.



CONCLUSION:

Operative clavicle, scapula and multiple rib fracture fixation can reduce duration of analgesic used, improves respiratory parameters and early rehabilitation.

REFERENCES:

- 1. Fowler TT, Taylor BC, Bellino MJ, Althausen PL. Surgical treatment of flail chest and rib fractures. J Am Acad Orthopaed Surg. 2014;22(12):751–60.
- 2. Taylor BC, French BG, Fowler TT. Surgical approaches for rib fracture fixation. J Orthop Trauma. 2013;27(7):e168–73.