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Dilemma of a Floating Shoulder; To Fix or Not to Fix

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INTRODUCTION:

The "floating shoulder" is a rare and complex injury involving concurrent fractures of the clavicle and scapula, typically caused by high-energy trauma such as motor vehicle accidents or falls. This injury disrupts the shoulder girdle, leading to instability and functional impairment. Management is challenging, with nonoperative treatment suitable for non-displaced fractures, while displaced fractures often require surgical intervention to restore alignment and stability(1, 2). Surgical fixation, particularly scapular plating, is crucial for displaced glenoid or scapular body fractures, as it enhances stability, reduces nonunion risk, and improves functional outcomes. Early mobilization post-surgery is vital to prevent complications like chronic pain and reduced range of motion.

CASE REPORT:

A 48-year-old male motorcyclist sustained a floating shoulder injury after a motor vehicle accident, resulting in a midshaft clavicle fracture and a comminuted scapular fracture. Due to the complexity and risk of nonunion, surgical fixation was deemed necessary. During the surgical procedure, the patient was positioned in a floppy lateral position to provide optimal access to both the clavicle and scapula. The clavicle was fixed with a locking plate, and the scapula was plated through a single incision(direct lateral approach), sparing the medial border to avoid muscle stripping. Postoperative radiographs confirmed satisfactory alignment, and early rehabilitation, including pendulum and active-assisted range-of-motion exercises, was initiated. The patient regained full shoulder mobility within six weeks, achieving pre-injury functional levels.

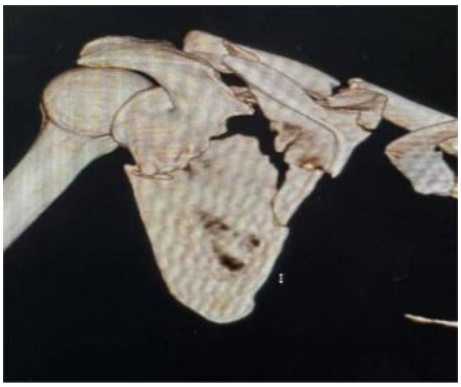

Figure 1: Pre-operative CT imaging

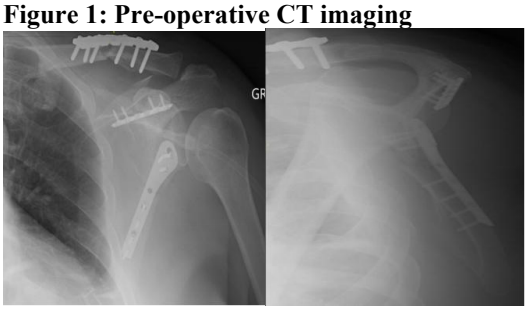

Figure 2: Postoperative Xray

CONCLUSION:

This case shows a successful surgical management of a complex floating shoulder injury involving a midshaft clavicle fracture (AO 15.2 A1) and a comminuted scapular fracture (AO 14B2). Internal fixation was prioritized due to high non-union risks. Clavicle fixation preceded scapular repair via a lateral approach, preserving deltoid function and avoiding medial border plating to prevent stiffness. Early mobilization and tailored rehabilitation ensured full shoulder motion within six weeks, emphasizing personalized treatment for optimal functional recovery.

REFERENCES:

1. Ekholm R, et al. *J Shoulder Elbow Surg*. 2017.
2. van der Meijden JA, et al. *J Bone Joint Surg Am*. 2017.