



**QUESTION |** Recently 2 patients, male aged 45-55, have suffered traumatic anterior glenohumeral dislocation. Both reported stumbling and grabbing a railing resulting in forced abduction, external rotation and extension. One suffered an avulsion of the subscapularis, the other a complete tear with 6mm retraction. Both had subsequent capsular and labral damage. Ten days following injury, examination of both patients revealed negative apprehension signs and only a minimal internal rotation strength deficit on rmt in neutral (15%).

**In your opinion, what is the efficacy of surgical and non-surgical interventions for this common type of shoulder instability?**

**ANSWER |** In the patient group you describe i.e. males 45 -50 who are first time dislocators, the recurrence rate is low, so the most appropriate treatment in the absence of rotator cuff pathology would be non operative, with surgery indicated if they had any further dislocations, as the recurrence rate after 2 dislocations is very high.

A clinical indicator for increased likelihood of recurrence would be persistence of a positive apprehension test and relocation test at 3 months post dislocation, but this in its self wouldn't change your management. The presence of a secondary capsulitis demonstrated by an equal loss of active and passive range makes recurrence highly unlikely and so is a good prognostic sign.

With any loss of function post dislocation particularly in the over 50 age group you have to exclude a significant rotator cuff tear, which would be present in around 50% of that patient group.

The major problem that your patients have is their subscapularis tears. Which given their age is highly likely to cause ongoing issues. Although the subscapularis is the largest muscle in the rotator cuff, clinical findings with complete tears can be quite subtle, the patient will often have a reasonable range of movement, though usually with some end range loss of forward flexion and abduction usually associated with a mild scapula dyskinesia. A positive lift –off test is usually the most consistent finding, strength testing in neutral rotation is generally not particularly helpful as the pectoralis major generally masks any weakness due to the subscapularis tear.

Patients with subscapularis tears generally complain of weakness, fatigability and pain with over shoulder activities particularly under load, and difficulties with activities involving placing the arm behind the back such as doing up bras, personal toilet etc. Some patients do demonstrate the catastrophic loss of function usually associated with cuff tears.

Also given that the subscapularis is the major dynamic stabilizer for the anterior shoulder leaving it unrepaired would probably increase the risk of recurrence. In fact, it is very easy to demonstrate increased anterior translation of the humeral head in the presence of any significant rotator cuff under a general anaesthetic in theatre.

In general, the patients you described would do much better from the point of view of long term shoulder function with a subscapularis repair which should be done on a semi urgent basis as fixed retraction of the muscle with fatty atrophy will occur over time making the repair difficult, in some cases impossible, and resulting in increased failure rates. They don't need a stabilization procedure.

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