

Non-operative management of shoulder instability – A new clinical framework

Non-operative management following a shoulder dislocation or subluxation remains a challenging and complex task. Accurate diagnosis of the condition, shared decision-making regarding operative and non-operative management, as well as timing of return to play is required. This workshop introduces a shoulder instability framework for progressive rehabilitation that addresses deficits in motor control, strength, and endurance in scapula and shoulder musculature to guide patients from an initial instability event, through to return to play (Figure 1).

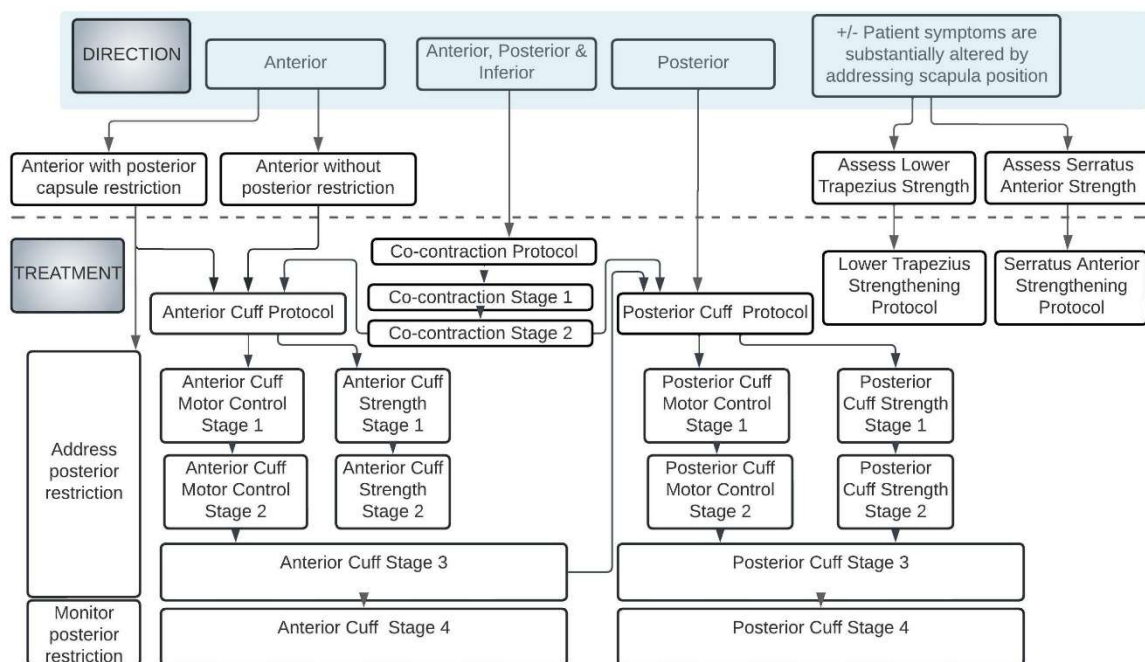


Figure 1: Progressive rehabilitation intervention from sub-acute to end-stage, based on the direction of instability, mobility limitations, and common muscular deficiencies

- In the acute setting, immobilisation and commencement of pain-free isometric exercises are recommended.
- Sub-acutely, a direction-specific rehabilitation approach is required as the pathology and impairments (such as strength and ROM) differ depending on

the direction of instability. This involves a staged progression, based upon the primary direction of instability which focuses on anterior cuff or posterior cuff or co-contraction protocols (Figure 1).

- Anterior cuff involves differentiation of subscapularis from other glenohumeral internal rotators. Differentiation of subscapularis from other internal rotators of the shoulder is thought to be clinically important as subscapularis provides support of the anterior shoulder and is commonly affected/torn in people with anterior shoulder instability.
- Posterior cuff motor control involves differentiation of the posterior cuff from scapula substitutional movements. Increasing posterior cuff strength is thought to decrease posterior humeral head slide on the glenoid by creating an active and passive constraint against mobility.
- Patients who present with instability in more than one direction are treated with a co-contraction protocol initially, before they commence anterior and posterior cuff strength/motor control progressions.
- Stage 3 Patients are then progressed to meet the needs of their daily life or sport by focusing on dynamic activities based upon the position, amplitude, load, and speed (PALS).
- Stage 4 Patients are integrated into more perturbations and uncontrolled environments to ready them to return to normal activities and sports.

The purpose of this workshop is to present these concepts and teach clinicians/attendees a new approach to the non-operative treatment of shoulder instability. Return to sport tests will also be discussed and practiced within the workshop. It is hoped that by sharing these ideas, patients with shoulder instability who are managed non-operatively will have improved clinical outcomes.