# ANTERIOR SHOULDER STABILIZATION CLINICAL PRACTICE GUIDELINE



# **Summary of Recommendations**

Risk Factors	<ul> <li>Excessive joint laxity</li> <li>Exceeding guideline ROM recommendations/goals</li> <li>History of instability</li> <li>Comorbidities including, but not limited to, connective tissue disorders</li> </ul>
Precautions	<ul> <li>Limited to 30 degrees external rotation for 6 weeks</li> <li>Progression of ROM should not be forced and is per patient's tolerance</li> <li>Return to jogging should be not initiated until 10-12 weeks depending on patient presentation and physician clearance</li> <li>Return to sport 5-6 months; minimum of 6 months for contact sports and climbing</li> <li>Initiation of throwing program at month 4 with goal of return to game at 9 months</li> <li>Refer back to surgeon with any positive apprehension testing</li> <li>No Olympic lifting or bar bench press until 3 months</li> </ul>
Manual Therapy	<ul> <li>Passive ROM not to exceed guideline</li> <li>Soft tissue mobilization per clinical judgment</li> <li>Joint mobilizations per guideline to reduce pain and improve mobility</li> </ul>
Corrective Interventions	<ul> <li>Therapeutic exercises to optimize rotator cuff and periscapular strength</li> <li>Neuromuscular re-education to improve joint stability and proprioception</li> <li>Therapeutic activity to improve ADL and leisure activities</li> <li>Manual (PROM, AAROM, AROM) to restore normal ROM per guidelines</li> <li>Modalities to control pain and swelling</li> </ul>
Criteria for Discharge with Return to Sport	<ul> <li>Full AROM appropriate for patient</li> <li>5/5 MMT shoulder and scapular strength</li> <li>No substitution patterns</li> <li>Independent with home exercise program per patient needs</li> <li>Low pain scores</li> <li>Return to full abilities with ADLs</li> <li>Initiation and guidance with return to sport phase</li> </ul>

# Remplissage Considerations

Remplissage (French for "fill in") is an arthroscopic procedure that insets the posterior shoulder capsule and infraspinatus tendon into the Hill-Sachs defect, converting the intra-articular location of the defect to an extra articular one

- Most often used in conjunction with Bankart repair
- No active external rotation strengthening for 12 weeks
- No internal rotation or cross body stretching for 12 weeks
- No pushing motions
- No Grade 3 or 4 posterior joint mobilizations for 12 weeks
- Treat like posterior rotator cuff repair

### **Latarjet Considerations**

The Latarjet operation is a surgical procedure used to treat recurrent shoulder dislocations typically caused by bone loss or a fracture of the glenoid.

- Open procedure: See Subscapularis Precautions
- Review surgical report to determine if subscapularis was taken down or split
- · Joint mobilizations above grade 1 begin at Week 6
- No anterior mobilizations
- No cross body stretching until Week 12

#### Subscapularis Precautions

Repair of the subscapularis following disruption due to traumatic or forces external rotation and abduction.

- No ER past 30 degrees
- No cross body adduction
- No active IR or IR behind the back
- No supporting of body weight with affected side (ie. pushing self up from a chair)

#### Phase I: Protection (0-6 weeks)

Goals	<ul> <li>Max protection of surgical repair (capsule, ligaments, labrum, sutures)</li> <li>Achieve staged ROM goals - do not significantly exceed</li> <li>Patient education on post-op restrictions and maintaining appropriate posture</li> <li>Minimize shoulder pain and inflammatory response</li> <li>Ensure adequate scapular function</li> </ul>
Weeks 0-3	<ul> <li>Protection         <ul> <li>Sling usage 4-6 weeks (discuss with physician) including while sleeping</li> </ul> </li> <li>ROM Goals by week 3         <ul> <li>Forward elevation to 90 degrees</li> <li>ER in scapular plane to 20 degrees (no ER at 90 degrees abduction) • No abduction or internal rotation</li> <li>Elbow/wrist/hand ROM as tolerated</li> </ul> </li> </ul>
Weeks 4-6	ROM Goals by week 6     PROM     Forward elevation limited to 135 degrees     IR to 50 degrees     Abduction to 115 degrees     ER in the scapular plane to 30 degrees     ER at 90 degrees abduction to 30 degrees     Cane and wall walks with limitations to 135 degrees     Pendulum exercises     AROM     Begin at week 4 within limitations to 115 degrees flexion  May begin elbow AROM     Strengthening     Begin submaximal isometrics (ER, Abduction, Flexion, Extension)     Scapular stabilization (scapular clocks)     IR/ER with light theraband at 0 degrees of abduction (within ROM restrictions)
Goals to Progress	<ul> <li>Appropriate healing of surgical repair by adhering to precautions and immobilization guidelines Staged ROM goals achieved but not significantly exceeded</li> <li>Minimal to no pain with ROM</li> </ul>

# Phase II: Intermediate Phase (Weeks 7-12)

Goals	<ul> <li>Achieve staged ROM goals to normalize PROM and AROM – do not significantly exceed</li> <li>Minimize shoulder pain</li> <li>Begin to increase strength and endurance</li> <li>Increase functional activities</li> </ul>
Weeks 7-9	Goals by week 9     PROM     May perform joint mobilizations (emphasis on posterior mobility)     Forward elevation 155 degrees     IR at 90 degrees of abduction to 60 degrees by week 8-9     ER at 20 degrees ABD to 60 degrees     ER at 90 degrees ABD to 75 degrees     RAOM     Elevation to 145 degrees      Strengthening     Begin light UBE     PRE's for scapular stabilizers (rows, shoulder extension, scapular retraction)     Initiate Thrower's 10 Program     Dynamic resistance with PNF patterns and manual techniques     Elbow flexion/extension strengthening     Begin CKC exercise with table/wall weight shifts
Weeks 10-12	<ul> <li>Initiation of jogging with physician clearance</li> <li>ROM Goals by week 12         <ul> <li>PROM</li> <li>WNL all planes</li> <li>AROM</li> <li>Elevation WNL</li> </ul> </li> <li>Strengthening         <ul> <li>Progress PREs in all planes</li> <li>Rhythmic stabilization ie. Prone medicine ball eccentric drops, free throws, ball taps, etc • Progress CKC exercises</li> </ul> </li> </ul>
Goals to Progress	<ul> <li>Staged AROM goals achieved with minimal to no pain and without substitution patterns</li> <li>Appropriate scapular posture at rest and dynamic scapular control during ROM and strengthening exercises</li> <li>Strengthening activities completed with minimal to no pain</li> </ul>

#### Phase III: Advanced Activity Phase (weeks 12-20)

Goals	<ul> <li>Normalize strength, endurance, neuromuscular control, and power</li> <li>Gradual and planned build up of stress to anterior capsulolabral tissues</li> <li>Gradual return to full ADLs, work, and recreational activities</li> </ul>
Weeks 12-20	ROM     Terminal ER stretches at 12 weeks     Self capsular stretches, AROM, and passive stretching as needed     Strengthening     Advanced isotonics     Initiate plyometrics (2-handed drills) i.e. chest pass     Ball catch/toss at 90 degrees abduction position     Begin dumbbell pec exercises

## Phase IV: Return to Sport/Activity (Weeks 16-20)

Goals	<ul> <li>ROM         <ul> <li>May begin more aggressive stretching techniques</li> </ul> </li> <li>Strengthening         <ul> <li>Begin overhead PRE's</li> <li>Begin light toss or volley (refer to return to throwing program)</li> <li>Continue with specific training program</li> <li>Return to full activity</li> <li>Bench Press with bar at 3 months</li> </ul> </li> </ul>
Goals to progress to Return to Sport	<ul> <li>Progress functional activities towards return activity or sport</li> <li>Enhance neuro-muscular control</li> <li>Improve strength, power, and endurance</li> <li>Muscular strength no less than 80% of contralateral side</li> <li>Full functional ROM</li> <li>5/5 scapular and rotator cuff strength</li> </ul>

Authors: Mitch Salsbery, PT, DPT, SCS

Reviewers: Mitch Salsbery, PT, DPT, SCS; Chelseana Davis, PT, DPT, SCS; Katherine Sullivan, PT, DPT, SCS,

ATC; Joann Walker, PT, SCS **Completion date:** April 14, 2016

#### References

Hayes K, Callanan M, Walton J, Paxinos A, Murrell GA. Shoulder Instability: Management and Rehabilitation: *JOSPT*. 2002; 32:1-13.

Lebar RD, Alexander AH: Multidirectional Shoulder instability. Clinical results of inferior capsular shift in an active-duty population. *AM J Sports Med* 1992 Mar-April; 20 (2): 193-198.

Wilk KE, Reinold MM, Dugas JR, Andrews JR. Rehabilitation Following Thermal-Assisted Capsular Shrinkage of the Glenohumeral Joint: Current Concepts. JOSPT. 2002;32: 268-292.

Gaunt BW, Shaffer MS, Sauers EL, Michener LA, McCluskey GM, Thigpen CA. The american society of shoulder and elbow therapists' consensus rehabilitaation guideline for arthroscopic anterior capsulolabral repair of the shoulder. *JOSPT*. 2010 40(3): 155-168