

ANTERIOR SHOULDER STABILIZATION CLINICAL PRACTICE GUIDELINE

Background

Ohio State's Anterior Shoulder Stabilization Rehabilitation Guideline is to be utilized following open or arthroscopic anterior shoulder stabilization procedures. Included surgical interventions include Bankart, Remplissage and Latarjet. The guideline is based on Bankart repair, but includes specific considerations based on additional techniques utilized. It is intended to be used in conjunction with the therapist and surgeon's collaborative input.

Disclaimer

Progression is time and criterion-based, dependent on soft tissue healing, patient demographics and clinician evaluation. Contact Ohio State Sports Medicine at 614-293-2385 if questions arise.

Summary of Recommendations

Risk Factors	<ul style="list-style-type: none"> Excessive joint laxity Exceeding guideline ROM recommendations/goals History of instability Comorbidities including, but not limited to, connective tissue disorders
Precautions	<ul style="list-style-type: none"> Limited to 30 degrees external rotation for 6 weeks Progression of ROM should not be forced and is per patient's tolerance Return to jogging should be not initiated until 10-12 weeks depending on patient presentation and physician clearance Return to sport 5-6 months; minimum of 6 months for contact sports and climbing Initiation of throwing program at month 4 with goal of return to game at 9 months Refer back to surgeon with any positive apprehension testing No Olympic lifting or bar bench press until 6 months
Manual Therapy	<ul style="list-style-type: none"> Passive ROM not to exceed guideline Soft tissue mobilization per clinical judgment Joint mobilizations per guideline to reduce pain and improve mobility
Corrective Interventions	<ul style="list-style-type: none"> Therapeutic exercises to optimize rotator cuff and periscapular strength Neuromuscular re-education to improve joint stability and proprioception Therapeutic activity to improve ADL and leisure activities Manual (PROM, AAROM, AROM) to restore normal ROM per guidelines Modalities to control pain and swelling
Outcome Testing	<ul style="list-style-type: none"> Disability of Arm Shoulder and Hand (DASH) Questionnaire Kerlan-Jobe Orthopaedic Clinic (KJOC) Questionnaire
Criteria for discharge with return to sport (9-24 months)	<ul style="list-style-type: none"> Full AROM appropriate for patient 5/5 MMT shoulder and scapular strength No substitution patterns Independent with home exercise program per patient needs Low pain scores Return to full abilities with ADLs Initiation and guidance with return to sport phase



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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 (Post-Op – 0-6 weeks)

Post Operative to 6 weeks	Goals <ul style="list-style-type: none"> • Max protection of surgical repair (capsule, ligaments, labrum, sutures) • Achieve staged ROM goals - do not significantly exceed • Patient education on post-op restrictions and maintaining appropriate posture • Minimize shoulder pain and inflammatory response • Ensure adequate scapular function
Post Operative to 3 weeks	Protection <ul style="list-style-type: none"> • Sling usage 4-6 weeks (discuss with physician) including while sleeping ROM Goals by week 3 <ul style="list-style-type: none"> • Forward elevation to 90 degrees • ER in scapular plane to 20 degrees (no ER at 90 degrees abduction) • No abduction or internal rotation • Elbow/wrist/hand ROM as tolerated
Weeks 4 to 6	ROM Goals by week 6 <i>PROM</i> <ul style="list-style-type: none"> • 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 <i>Start AAROM</i> <ul style="list-style-type: none"> • Cane and wall walks with limitations to 135 degrees • Pendulum exercises <i>AROM</i> <ul style="list-style-type: none"> • Begin at week 4 within limitations to 115 degrees flexion <i>May begin elbow AROM</i> Strengthening <ul style="list-style-type: none"> • 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 to Next Phase	<ol style="list-style-type: none"> 1. Appropriate healing of surgical repair by adhering to precautions and immobilization guidelines 2. Staged ROM goals achieved but not significantly exceeded 3. Minimal to no pain with ROM



Phase II: Intermediate Phase

Weeks 7 to 12	<p>Goals</p> <ul style="list-style-type: none"> • Achieve staged ROM goals to normalize PROM and AROM – do not significantly exceed • Minimize shoulder pain • Begin to increase strength and endurance • Increase functional activities
Weeks 7 to 9	<p>ROM Goals by week 9</p> <p><i>PROM</i></p> <ul style="list-style-type: none"> • 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 <p><i>AROM</i></p> <ul style="list-style-type: none"> • Elevation to 145 degrees <p>Strengthening</p> <ul style="list-style-type: none"> • 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 to 12	<ul style="list-style-type: none"> • Initiation of jogging with physician clearance <p>ROM Goals by week 12</p> <p><i>PROM</i></p> <ul style="list-style-type: none"> • WNL all planes <p><i>AROM</i></p> <ul style="list-style-type: none"> • Elevation WNL <p>Strengthening</p> <ul style="list-style-type: none"> • Progress PREs in all planes • Rhythmic stabilization ie. Prone medicine ball eccentric drops, free throws, ball taps, etc • Progress CKC exercises
Goals to Progress to Next Phase	<ol style="list-style-type: none"> 1. Staged AROM goals achieved with minimal to no pain and without substitution patterns 2. Appropriate scapular posture at rest and dynamic scapular control during ROM and strengthening exercises 3. Strengthening activities completed with minimal to no pain



Phase III: Advanced Activity Phase

Weeks 12-20	Goals <ul style="list-style-type: none">• Normalize strength, endurance, neuromuscular control, and power• Gradual and planned build up of stress to anterior capsulolabral tissues• Gradual return to full ADLs, work, and recreational activities
Weeks 12 to 16	ROM <ul style="list-style-type: none">• Terminal ER stretches at 12 weeks• Self capsular stretches, AROM, and passive stretching as needed Strengthening <ul style="list-style-type: none">• 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	ROM <ul style="list-style-type: none">• May begin more aggressive stretching techniques Strengthening <ul style="list-style-type: none">• Begin overhead PRE's• Begin light toss or volley (refer to return to throwing program)• Continue with specific training program• Return to full activity• Bench Press with bar at 6 months
Goals to Progress to Return to Sport	<ol style="list-style-type: none">1. Progress functional activities towards return activity or sport2. Enhance neuro-muscular control3. Improve strength, power, and endurance4. Muscular strength no less than 80% of contralateral side5. Full functional ROM6. 5/5 scapular and rotator cuff strength

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