



After Posterior Shoulder Stabilization

Rehabilitation Protocol

Phase 1: Weeks 0-4

Restrictions

- ❖ No shoulder motion

Immobilization

- ❖ Use of a gunslinger orthosis for 4 weeks

Pain Control

- ❖ Reduction of pain and discomfort is essential for recovery
- ❖ Patients treated with an arthroscopic stabilization procedure experience less post-operative pain than patients treated with an open stabilization procedure
- ❖ Medications:
 - ✓ Narcotics for 7-10 days following surgery
 - ✓ NSAIDs for patients with persistent discomfort following surgery
- ❖ Therapeutic Modalities
 - ✓ Ice, ultrasound, HVGS
 - ✓ Ice at end of session

Motion: Shoulder

- ❖ None

Motion: Elbow

- ❖ Passive progress to active
 - ✓ 0-130 degrees of flexion
 - ✓ Pronation and supination as tolerated

Muscle Strengthening

- ❖ Grip strengthening only

Phase 2: Weeks 4-8

Criteria for Progression to Phase 2

- ❖ Adequate immobilization

Restrictions

- ❖ Shoulder motion: active ROM only
 - ✓ Forward flexion 120 degrees
 - ✓ Abduction 45 degrees

- ✓ External rotation as tolerated
- ✓ Internal rotation and adduction to stomach
- ❖ Avoid provocative maneuvers that re-create position of instability
 - ✓ Avoid excessive internal rotation

Immobilization

- ❖ Gunslinger- discontinue

Pain Control

- ❖ Medications
 - ✓ NSAIDs for patients with persistent discomfort
- ❖ Therapeutic modalities
 - ✓ Ice, ultrasound, HVGS
 - ✓ Moist heat before therapy as needed at week 6, ice at end of session

Shoulder Motion: Active Range of Motion Only

- ❖ Goals
 - ✓ Forward flexion 120 degrees
 - ✓ Abduction 45 degrees
 - ✓ External rotation as tolerated
 - ✓ Internal rotation and adduction to stomach
- ❖ Exercises
 - ✓ Active ROM only

Muscle Strengthening

- ❖ Rotator cuff strengthening
- ❖ Closed-chain isometric strengthening with the elbow flexed to 90 degrees and the arm at the side
 - ✓ Forward flexion
 - ✓ External rotation
 - ✓ Internal rotation
 - ✓ Abduction
 - ✓ Adduction

Strengthening of scapular stabilizers

- ❖ Closed-chain strengthening exercises
- ❖ Scapular retraction (rhomboides, middle, trapezius)
- ❖ Scapular protraction (serratus anterior)
- ❖ Scapular depression (latissimus dorsi, trapezius, serratus anterior)
- ❖ Shoulder shrugs (trapezius, levator scapulae)

Phase 3: Weeks 8-12

Criteria for Progression to Phase 3

- ❖ Minimal pain and discomfort with active ROM and closed-chain strengthening exercises
- ❖ No sensation or findings of instability with above exercises

Restrictions

- ❖ Shoulder motion: active and active-assisted motion exercises

- ✓ 160 degrees of forward flexion
- ✓ Full external rotation
- ✓ 70 degrees of abduction
- ✓ Internal rotation and adduction to stomach

Pain Control

- ❖ Medications
 - ✓ NSAIDs for patients with persistent discomfort
- ❖ Therapeutic modalities
 - ✓ Ice, ultrasound, HVGS
 - ✓ Moist heat before therapy as needed, ice at end of session

Motion: Shoulder

Goals

- ❖ 160 degrees of forward flexion
- ❖ Full external rotation
- ❖ 70 degrees of abduction
- ❖ Internal rotation and adduction to stomach

Exercises

- ❖ Active ROM exercises
- ❖ Active-assisted ROM exercises

Muscle Strengthening

- ❖ Rotator cuff strengthening three times per week, 8-12 repetitions for three sets
 - ✓ Continue with closed-chain isometric strengthening
 - ✓ Progress to open-chain strengthening with Thera-bands
 - ✓ Exercises performed with the elbow flexed to 90 degrees
 - ✓ Starting position is with the shoulder in the neutral position of 0 degrees of forward flexion, abduction, and external rotation
 - ✓ Exercises are performed through an arc of 45 degrees in each of the five planes of motion
 - ✓ Six color-coded bands are available; each provides increasing resistance from 1-6 pounds, at increments of 1 pound
 - ✓ Progression to the next band occurs usually in 2-3 week intervals. Patients are instructed not to progress to the next band if there is any discomfort at the present level
 - ✓ Theraband exercises permit concentric and eccentric strengthening of the shoulder muscles and are a form of isotonic exercises (characterized by variable speed and fixed resistance)
 - Internal rotation
 - External rotation
 - Abduction
 - Forward flexion
- ❖ Progress to light isotonic dumbbell exercises
 - ✓ Internal rotation

- ✓ External rotation
- ✓ Abduction
- ✓ Forward flexion

Strengthening of scapular stabilizers

- ❖ Continue with closed-chain strengthening exercises
- ❖ Advance to open-chain isotonic strengthening exercises

Phase 4: Months 3-6

Criteria for Progression to Phase 4

- ❖ Minimal pain or discomfort with active ROM and muscle strengthening exercises
- ❖ Improvement in strengthening of rotator cuff and scapular stabilizers
- ❖ Satisfactory physical examination

Goals

- ❖ Improve shoulder strength, power, and endurance
- ❖ Improve neuromuscular control and shoulder proprioception
- ❖ Restore full shoulder motion
- ❖ Establish a home exercise maintenance program that is performed at least three times per week for both stretching and strengthening

Pain Control

- ❖ Medications
 - ✓ NSAIDs for patients with persistent discomfort
 - ✓ Subacromial injections: corticosteroid/local anesthetic combination for patients with findings consistent with secondary impingement
 - ✓ GH joint: corticosteroid/local anesthetic combination for patients whose clinical findings are consistent with GH joint pathology
- ❖ Therapeutic modalities (as needed)
 - ✓ Ice, ultrasound, HVGS
 - ✓ Moist heat before therapy, ice at end of session

Motion: Shoulder

Goals

- ❖ Obtain motion that is equal to contralateral side
- ❖ Active ROM exercises
- ❖ Active-assisted ROM exercises
- ❖ Passive ROM exercises
- ❖ Capsular stretching (especially posterior capsule)

Muscle Strengthening

- ❖ Rotator cuff and scapular stabilizer strengthening as outlined above
- ❖ Three times per week, 8-12 repetitions for three sets

Upper Extremity Endurance Training

- ❖ Incorporated endurance training for the upper extremity
 - ✓ Upper body ergometer

Proprioceptive Training

- ❖ PNF patterns

Functional Strengthening

- ❖ Plyometric exercises

Maximum improvement is expected by 12 months

Warning Signs

- ❖ Persistent instability
- ❖ Loss of motion
- ❖ Lack of strength progression- especially abduction
- ❖ Continued pain

Treatment of Complications

- ❖ These patients may need to move back to earlier routines
- ❖ May require increased utilization of pain control modalities as outlined above
- ❖ May require imaging work-up or repeat surgical intervention