



## Rehabilitation Protocol Posterior Shoulder Reconstruction

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Post-op appointments: 1 WEEK, 5 WEEKS, 10 WEEKS, 16 WEEKS

### PHASE I (WEEKS 0-4)

**Appointments:** home therapy

**Immobilization:**

- Fixed external rotation immobilization with supporting abduction pillow to be worn at all times except for showering and rehab under guidance of PT. Patient should remain in brace for 6 weeks.
- Wear sling while sleeping

**Precautions:**

- Sling immobilization required for soft tissue healing for 6 weeks after surgery; remove the sling during post-operative week 6 in a safe/controlled environment.
- No shoulder internal rotation past neutral for 6 weeks. No shoulder internal rotation with abduction for 8-10 weeks after surgery to protect repair. No internal rotation from behind back for 8 weeks.

**Therapeutic Exercise:**

- Hand grip strength
- Elbow, forearm, and wrist AROM
- Cervical spine and scapular AROM
- Desensitization techniques for axillary nerve distribution.
- Postural/Core stabilization

**Cardiovascular Fitness:**

- Stationary Bike
- Walking
- Avoid cardiovascular exercise with running/jumping due to distractive forces during landing.

### **Modalities**

- Ice after PT (PRN)

## **PHASE II (WEEKS 5-8)**

### **Therapy Appointments:**

- rehabilitation appointments are 1-2 times per week

### **Immobilization:**

- Discontinue sling immobilization at post operative week 6

### **Precautions:**

- Remain in sling except for exercises beginning at week 4.
- No internal rotation until post operative week 6.

### **Therapeutic Exercise:**

- Begin passive external rotation and forward flexion at week 4.
- Progress to AAROM external rotation and forward flexion beginning at week 6.
- Begin isometric strengthening at post operative week 8.
- Continue Phase 1 exercises as needed.

### **Cardiovascular Fitness:**

- Stationary Bike, Stairmaster, walking
- No swimming, running.

### **Progression Criteria**

- Full active ROM, except shoulder internal rotation
- Submaximal isometric strengthening.

## **PHASE II (WEEKS 8-12)**

### **Appointments:**

- Rehabilitation appointments are once every week decreasing frequency to once every other week towards the end of phase III.]

### **Rehabilitation Goals:**

- Full shoulder AROM, progress to submaximal internal rotation
- Progress rotator cuff strengthening, starting with isometrics.

- Full peri-scapular strength

**Precautions:**

- Avoid posterior pain with activity and rehabilitation; post-activity soreness should be mild and subside within 12 hours.
- All activities should remain non provocative and low velocity
- Avoid activities where there is a risk of falling or contact to the extremity.
- No swimming, throwing, or contact sports.

**Therapeutic Exercise**

- No internal rotation ROM restriction, which can be gradually normalized to non-operative shoulder. This should be done through PROM and AROM with appropriate scapular positioning.
- Begin strengthening shoulder flexion in prone position with appropriate scapular positioning. Progress to D1,D2 standing without exceeding 90 degrees of shoulder abduction.

**Cardiovascular Exercise:**

- Walking, biking, Stairmaster.
- Begin jogging and progress to running towards the end of phase III
- No swimming, throwing, overhead sports

**Progression Criteria:**

- Patient may progress to phase IV if they have met the above goals and are at least 12 weeks post surgery

## PHASE IV (MONTHS 3-6)

**Appointments:**

- Rehabilitation once every 2-3 weeks

**Rehabilitation Goals:**

- Patient to demonstrate shoulder stability with dynamic, mid-high velocity movements
- Normal 5/5 rotator cuff strength in 90 degrees abduction
- Full multi-plan AROM

**Therapeutic Exercise:**

- Advance strengthening as tolerated: begin with isometrics in 0-90 degrees abduction and progress to light weights (1-2lbs). Incorporate PNF/Dynamic/Functional movements in later progression. Therabands can be used when full ROM is achieved during the exercise.

- Begin sport specific progression that emphasize core and hip strength with functional and dynamic shoulder stabilization
- Examples: medicine ball exercises that incorporate trunk rotation and rotator cuff control. Cable column, dumbbell exercises with shoulder internal rotation and external rotation in 90 degrees abduction. BAPS/balance boards in push up position. Rapid alternating movements in supine D2 diagonal. Closed kinetic chain stabilization with narrow base of support
- Very initial throwing program progression. Should not begin full throwing until 5-6months

#### **Cardiovascular Fitness:**

- Walking, biking, Stairmaster, Running
- Swimming can start at 3 months

#### **Progression Criteria:**

- Patient may progress to Phase V if they have met the above goals and have no shoulder apprehension or impingement signs.

## **PHASE V (>6 MONTHS)**

#### **Appointments:**

- Rehabilitation appointments as needed for advanced return to sport

#### **Rehabilitation Goals:**

- Patient to demonstrate gleno-humeral and scapula-thoracic stability with high velocity movements and changes in direction movements in a sport specific pattern. (swimming, throwing)
- No shoulder apprehension
- Adequate core and hip strength and mobility to eliminate any compensatory stresses to the shoulder
- Work capacity cardiovascular endurance for specific sport or work demands

#### **Precautions:**

- Progress to sport with caution and take into consideration level of athletic competition
- Avoid posterior shoulder pain with activity; post-activity soreness should be mild and subside within 24 hours

#### **Therapeutic Exercise:**

- Higher velocity strengthening and control, such as inertial, Plyometrics, and rapid deceleration/eccentric strengthening. Plyometrics should start 2 hand breaths below shoulder height and progress to overhead as tolerated.

**Cardiovascular Exercise:**

- Design to use sport specific energy systems

**Progression Criteria:**

- Patient may return to sport after receiving clearance from Dr. Norberg, Ryan Nelson, Physical Therapy, and Athletic Trainer.