

# **Posterior Glenoid Reconstruction**

# Phase 0 – Immediate Post-Surgical (Week 2-4)

#### Goals:

• Decrease pain and inflammation

## Precautions:

- Postoperative immobilizer for 6 weeks
- Brace to be worn at all times (even when sleeping) with the exception of exercise activity and bathing

# Week 0-1

- No formal PT required
- Active elbow flexion-extension and pronation-supination
- Active ROM cervical spine

# Phase I – Immediate Post-Surgical (Week 2-4)

#### Goals:

- Allow/promote healing of repaired posterior capsule
- Initiate early protected ROM
- Retard muscular atrophy
- Decrease pain and inflammation

# **Precautions:**

- Postoperative immobilizer for 6 weeks
- Brace to be worn at all times (even when sleeping) with the exception of exercise activity and bathing
- No overhead activity
- No forward flexion for first 6 weeks

## Week 2-4

- Gripping exercises with putty
- Active elbow flexion-extension and pronation-supination
- Active ROM cervical spine
- Pendulums

# **Phase II – Protection (Week 5-6)**

#### Goals:

- Gradual increase in ROM
- Normalize arthrokinematics
- Decrease pain and inflammation

#### **Precautions**

- Postoperative immobilizer for 6 weeks
- Brace to be worn at all times (even when sleeping) with the exception of exercise activity and bathing



- No overhead activity
- No forward flexion for first 6 weeks

## Week 5-6

- Passive ROM progressing to active-assisted ROM of GH joint
  - o External rotation to 25-30° at 30-45° of abduction
  - o Internal rotation to 15-25° at 30-45° of abduction
- Submaximal pain free shoulder isometrics in the plane of the scapula
  - o Flexion
  - Abduction
  - Extension
  - External rotation
- Discontinue sling/immobilizer 6 weeks post-surgery

# Phase III – Intermediate Phase (Week 7-16)

#### Goals:

- Full, nonpainful ROM
- Normalize arthrokinematics
- Enhance strength
- Improve neuromuscular control

## Week 7-9

- Active-assisted exercises of GH joint
  - External rotation in multiple planes of shoulder abduction (up to 90°)
  - Shoulder flexion to tolerance
  - o Elevation in the plane of the scapula to tolerance
  - o Shoulder abduction (pure) to 90°
  - o Internal rotation 35° at 45° of abduction
- Pulleys (AAROM)
  - o Shoulder elevation in the plane of the scapula to tolerance
  - Shoulder flexion to tolerance
- Gentle self-capsular stretches as needed/indicated
- Gentle Joint Mobilization (Grades I-II) to Reestablish Normal Arthrokinematics
  - Scapulothoracic joint
  - o GH joint (avoid posterior glides)
  - o SC joint
  - o AC joint
- AROM Exercises
  - Active abduction to 90°
  - Active external rotation to 90°
  - $\circ$  IR to 35°

#### Week 10-12

- A/AROM to AROM as appropriate
  - External rotation to tolerance



- Shoulder abduction to tolerance
- Shoulder flexion to tolerance
- o Pulleys: flexion, abduction, and elevation in the plane of the scapula to tolerance
- o Internal rotation to no more than 40°
- Continue gentle Joint Mobilization (Grades I-II) to Reestablish Normal Arthrokinematics
- Initiate IR isometrics in slight ER (do not perform past neutral)
- Initiate theraband for internal and external rotation at 0° abduction (IR later in the phase)
- Initiate isotonic dumbbell program
  - Shoulder abduction
  - Shoulder flexion
  - Latissimus dorsi
  - o Rhomboids
  - Biceps curl
  - o Triceps kick-out over table
  - o Push-ups into wall (serratus anterior)

### Week 13-16

- Active internal rotation at 90° GH abduction with elbow at 90° flexion
- Dumbbell supraspinatus
- Theraband exercises for rhomboids, latissimus dorsi, biceps, and triceps

# Phase IV – Dynamic Strengthening (Week 17-20)

### Goals:

- Enhance strength, power, and endurance
- Enhance neuromuscular control
- Emphasize
  - High-speed/high-energy strengthening exercises
  - Eccentric training
  - Diagonal patterns

# Criteria for progression to Phase V

- Full, nonpainful ROM
- No complaints of pain/tenderness
- Strength 70% of contralateral side

## Week 13-16

- Continue internal and external rotation theraband exercises at 0° abduction (arm at side)
- Theraband for rhomboids
- Theraband for latissimus dorsi
- Theraband for a biceps and triceps
- Continue dumbbell exercises for supraspinatus and deltoid
- Progressive serratus anterior push-up-anterior flexion
- Continue trunk and lower extremity strengthening and conditioning exercises
- Continue self-capsular stretches

## Week 17-20



- Isotonic shoulder strengthening exercises isolating the rotator cuff-including sidelying external rotation, prone arm raises at 0, 90 & 120°, prone external rotation, and internal rotation at 0 & 90°; progress to standing strengthening exercise once able to tolerate resistance against gravity without substitution
- Progress scapulothoracic/upper back musculature strengthening exercises
- Dynamic stabilization exercises
- Proprioceptive Neuromuscular Facilitation (PNF) exercises

# Phase V – Return to Full Activity (Week 21+)

#### Goals:

- Progressively increase activities to prepare patient for unrestricted functional return Week 21+
  - Continue theraband, and dumbbell exercises outlined in phase 3
  - Continue ROM exercises
  - Continue strengthening exercises for scapular and rotator cuff muscles
  - Progress to functional activities needed for ADL's and sport

# Criteria to Return to Sport

- Surgeon clearance
- Pain free shoulder function
- Adequate active and passive range of motion necessary for required sport/activity
- Greater than 90% strength as compared to the non-operative shoulder