

## Postoperative Rehabilitation Protocol for Posterior Labral Repair

*\*Patient will wear an abduction pillow sling for 6 weeks postoperatively*

*\*Unless otherwise specified, do not begin PT until patient has been seen for 2-week postoperative visit*

### Postoperative weeks 0-4

- Goals
  - Increase PROM
  - Control pain with modalities PRN
- Precautions
  - Wear sling at all times except during physical therapy and home exercises
  - Keep arm in front of body when out of sling. Do **not** reach the arm behind the back
- Range of Motion
  - Flexion to 60°
  - Extension to neutral (0°)
  - Abduction to 90°
  - External rotator to 45°
  - Internal rotator to neutral with arm at side (0°)
- Strengthening
  - Scapular strengthening exercises (shrugs, protraction, retraction, depression, etc.)
  - Shoulder sub-maximal (pain free) isometrics with sling in all directions: flexion, extension, abduction, adduction, internal rotation, and external rotation.
  - Cervical ROM (chin tucks)
  - Wrist and hand exercises with light resistance, if appropriate
- Home instructions
  - Continue to write or type with operative hand while in sling
  - No lifting with operative shoulder
  - Do not support bodyweight with operative shoulder
  - Do not reach the operative arm behind the back

### Postoperative weeks 4-6

- Goals
  - Increase PROM
  - Begin AAROM
  - Begin shoulder strengthening exercises
  - Modalities PRN
- Precautions
  - Continue to wear sling daily except during home exercises and physical therapy. May discontinue sling use at night while sleeping but avoid internal rotation
  - Do **not** reach behind the back
- Range of Motion
  - Passive ROM with pulleys or other assistive device
    - Flexion to 90°

- Abduction to full as tolerated
  - Extension to 30°
  - ER to 45° with the arm abduction to 90°
  - ER to full as tolerated with arm at side
  - IR to 30° with arm abduction to 90°
- AAROM with wand or other assistive device (standing or supine)
  - Wall-walks in flexion and abduction
- Strengthening
  - Continue scapular strengthening exercises
  - Continue isometrics in all directions
  - Begin light Theraband exercises for ER strengthening with elbow at the side
- Home Instructions
  - No lifting, pulling, or pushing greater than 2lbs
  - No overhead work or repetitive motions with the shoulder

#### Postoperative weeks 6-8

- Goals
  - Advance ROM
  - Advance strengthening exercises with resistance
  - Begin neuromuscular control exercises
- Precautions
  - Discontinue sling at 6 weeks post-op
  - Limit IR to 45° until 12 weeks post-op
- Range of Motion
  - Advance AROM to full as tolerated (except IR)
    - Limit IR to 45° with both the arm at side and abducted to 90°
  - Regain normal glenohumeral-scapular 2:1 motion
- Strengthening
  - Advance shoulder strengthening exercises to include UBE and wall push-ups
  - Isotonic rotator cuff strengthening (progress resistance as tolerated up to 6-8lbs.)
    - Standing flexion, extension, abduction, and scaption with thumb down with dumbbells or Therabands
    - Standing IR and ER with Theraband with arm abducted 25° at side (with pillow or towel)
  - Advance scapular strengthening exercises
  - Begin neuromuscular control exercises
    - D1 and D2 PNF patterns with no more than 3lbs
- Home instructions
  - No lifting, pulling, or pushing greater than 5lbs
  - No overhead work or repetitive motions with the shoulder

#### Postoperative weeks 8-10

- Goals
  - Advance to full ROM (except for IR)
  - Advance shoulder strengthening exercises
  - Advance neuromuscular control exercises
- Precautions
  - Limit IR to 45° until 12 weeks post-op
- Range of Motion

- Full active ROM as tolerated (except IR)
  - Limit IR to 45° with both the arm at side and abducted to 90°
- Strengthening
  - Continue scapular strengthening and isotonic rotator cuff strengthening exercises until full ROM is restored
  - Continue dumbbell exercises
    - Prone scaption with thumb up and thumb down
    - Prone horizontal abduction with thumb up and thumb down
    - Prone extension
  - Continue neuromuscular exercises
    - Supine dynamic/rhythmic stabilization in 90° flexion and 90° abduction with manual resistance
    - Body blade or other perturbation device in 90° flexion and 90° abduction
  - Isokinetic strengthening with 60° block:
    - Speeds of 180°, 150°, 120°, 90°, and 60°/second (8-10 reps at each speed)
- Home Instructions
  - No lifting, pulling, or pushing greater than 7lbs
  - No overhead work or repetitive motions with the shoulder

#### Postoperative weeks 10-12

- Goals
  - Advance to full ROM in all directions at 12 weeks post-op
  - Advance strengthening exercises and begin traditional weight training with machines and free weights
- Precautions
  - Limit IR to 45° until 12 weeks post-op
- Range of Motion
  - Advance IR to full at 12 weeks post-op
  - Continue to advance full ROM in all other directions as needed
- Strengthening
  - Advance rotator cuff strengthening exercises with weights 8-10lbs in all directions
  - Advance neuromuscular control exercises in D1 and D2 patterns with manual resistance
  - Standing dynamic/rhythmic stabilization in 90° flexion and 90° abduction with ball against wall and manual resistance
  - Continue isokinetic strengthening above, advancing to 15 reps at each speed
  - For throwing athletes: begin thrower specific strengthening program (Thrower's 10 program)
- Home Instructions
  - No lifting, pulling, or pushing greater than 10lbs
  - No overhead work or repetitive motions with the shoulder

#### Postoperative weeks 12-14

- Goals
  - Restore and maintain full ROM in all directions
  - Advance strengthening and neuromuscular control
- Strengthening
  - Continue therapeutic exercises above
  - Rotator cuff strengthening exercises with eccentric manual resistance
  - Advance PNF D1 and D2 pattern exercises with manual resistance

- Advance isokinetic strengthening to full ROM
- Begin traditional weight training with machines
  - Progress to free weight use as tolerated
- Throwing athletes continue thrower's 10 exercises
- Home Instructions
  - No lifting, pulling, or pushing greater than 15lbs. Progress as tolerated (3-5lbs per week)
  - Start progression to overhead work

### **Thrower's Progression Beyond 14 Weeks:**

#### Postoperative weeks 14-16

- Throwing Progression
  - Light tennis ball tossing at 60% velocity for 20-30 feet max
  - Focus on throwing mechanics: wind up, early cocking, late cocking, acceleration, and follow through
- Strengthening
  - Continue weight training progression and therapeutic exercises above
  - Begin isokinetic exercises at higher speeds (240°, 270°, 300°, 330°, 360°/ second)

#### Postoperative weeks 16-24

*For throwing athletes: perform isokinetic testing below (if available). If passes test, begin interval throwing program. Re-test monthly until passed*

- Isokinetic Testing Protocol
  - Patient is seated
  - Test uninvolved shoulder first
  - Position: shoulder in scapular plane at 90° abduction and 30° flexion, with dynamometer at 0° tilt and 90° rotation
  - Use 3 sub-max reps and 3 max reps for warm up
  - Do 6 reps at 60°/second, then 12 reps at 300°/second (allowing at least one minute of rest between test speeds)
- Scores equal to or greater than the following are considered passing:
  - ER/IR unilateral ratio: 70%
  - ER bilateral ratio: 98%
  - IR bilateral ratio: 105%
  - ER peak torque/BW ratio: 18%
- Return to Sport Criteria
  - Pass strength test
  - Completed throwing program
  - No pain with activity
  - Surgeon clearance has been obtained
  - No less than 5 months post-op for return to contact sports