# Xinning Li, M.D.

Professor of Orthopaedic Surgery Sports Medicine and Shoulder Surgery Boston University School of Medicine – Boston Medical Center Boston University Sports Medicine Fellowship – Director Boston University Athletics – Team Physician



725 Albany Street – 4<sup>th</sup> Floor Boston, MA 02118 (617) 638-5633 (Telephone – Shapiro Office) (617) 358-3400 (Telephone – Ryan Center) (617) 414-5226 (Fax) www.tigerortho.com





## Arthroscopic Posterior Labral Repair - Shoulder Stabilization:

### **Physical Therapy Protocol**

The following physical therapy guidelines were developed by Dr. Xinning Li. Progression is both criteria based and patient specific. Phases and time frames are designed to give the clinician and therapist a general sense of progression. The rehabilitation program following anterior shoulder stabilization emphasizes early, controlled motion to prevent contractures and to avoid excessive passive stretching later on. External rotation and extension of the shoulder are progressed slowly to protect the repair of the labrum and to avoid excessive stretching of the anterior capsule. The program should balance the aspects of tissue healing and appropriate interventions to restore ROM, strength, and function. Overhead activities are progressed last. Please call and notify Dr. Li's office if you are deviating from these recommendations or if the patient has increased pain or stiffness that is not expected.

## Weeks 1-3: Phase I – Maximum Protection Phase

#### Sling Immobilizer: AT ALL TIMES when not doing exercises

#### **Goals:**

- 1. Promote healing: reduce pain, inflammation and swelling
- 2. Elevation in plane of scapula: to 90°
- 3. External Rotation: 45° Internal Rotation: Limit to neutral only
- 4. Independent home exercise program (HEP)

#### **Exercises:**

- □ Passive ROM in plane of scapula (supine) as tolerated (NO PAIN)
- □ Passive external rotation (ER) as tolerated and extension to neutral (NO PAIN)
- □ Limit internal rotation to neutral.
- □ Scapular isometrics, mobility and stabilizer exercises

- □ Pain-free submaximal deltoid isometrics
- □ Elbow/wrist active range of motion. Modalities as needed for pain and edema control

#### Advancement Criteria:

- 1. ER to 45°, minimal pain or inflammation
- 2. Elevation in plane of scapula to 90°

### Weeks 4-7: Phase II

Sling Immobilizer: Discontinue or Wane off from week 4 to 5.

#### Goals:

- 1. Continue to promote healing
- 2. Continue with PROM and transition to AAROM
- 3. Internal rotation to 30° (Arm at 90°); Elevation in plane of scapula to 120°
- 4. ER as tolerated
- 5. Begin to restore scapula and rotator cuff strength

#### Exercises:

- □ Active Assisted FF in scapular plane to 120: wand exercises, <u>no pulleys</u>
- □ Active Assisted IR to 30 degrees: wand exercises (NO PAIN)
- □ Active Assisted ER as tolerated
- □ Manual scapula side-lying exercises
- □ Internal/ external rotation isometrics in modified neutral (submaximal, pain-free)
- □ Modalities as needed for pain and edema control
- □ Progress HEP as tolerated

#### Advancement Criteria:

- 1. Minimal pain and inflammation
- 2. ER to 45/ FF in the plane of the scapula to 120
- 3. IR to 30 with the arm at  $90^{\circ}$
- 4. IR/ ER strength +4/5

### Weeks 8-13: Phase III

#### <u>Goals:</u>

- 1. Restore full shoulder range of motion (ROM) in FF and ER
- 2. Improve Internal Rotation to Full ROM
- 3. Restore normal scapulohumeral rhythm
- 4. Upper extremity strength +5/5
- 5. Restore normal flexibility
- 6. Begin to restore upper extremity endurance
- 7. Isokinetic IR/ER strength 85% of unaffected side

#### Exercises:

- □ Active assisted FF in scapular plane to tolerance
- □ Active assisted ER to tolerance (go SLOW with ER)
- □ Active assisted IR to tolerance
- □ Begin active assisted ROM for internal rotation
- □ Progress scapular strengthening include closed chain exercises
- □ Begin isotonic IR/ER strengthening in modified neutral (pain free)

- □ Begin latissimus strengthening (progress as tolerated)
- □ Begin humeral head stabilization exercises (if adequate strength and ROM)
- □ Begin upper extremity flexibility exercises
- □ Isokinetic training and testing
- □ Modalities as needed

#### Advancement Criteria:

- 1. Normal scapulohumeral rhythm
- 2. Minimal pain and inflammation
- 3. IR/ER strength 5/5
- 4. Full upper extremity ROM
- 5. Isokinetic IR strength 85% of unaffected side

## Weeks 14-18: Phase IV

#### Goals:

- 1. Restore normal neuromuscular function
- 2. Maintain strength and flexibility
- 3. Isokinetic IR/ER strength at least equal to the unaffected side
- 4. > 66% Isokinetic ER/IR strength ratio
- 5. Prevent Re-injury

#### Exercises:

- D Progress to full functional ROM
- □ Advance IR/ER strengthening to 90/90 position if required
- □ Continue full upper extremity strengthening program
- □ Continue upper extremity flexibility exercises
- □ Isokinetic strengthening and testing
- □ Activity-specific plyometrics program
- □ Address trunk and lower extremity demands
- □ Begin sport or activity-related program

### **Discharge Criteria:**

- 1. Pain-free sport or activity-specific program
- 2. Isokinetic IR/ER strength equal to unaffected side
- 3. Independent home exercise program
- 4. Independent Sport or activity specific program

### Physician's Signature:

Xinning Li, M.D. Professor of Orthopaedic Surgery Boston University School of Medicine www.tigerortho.com



