

# REHABILITATION PROTOCOL OPEN/ARTHROSCOPIC BICEPS TENODESIS

Chase D. Smith, MD

PRECAUTIONS: No heavy object lifting overhead

No jerking movements

Do not use affected shoulder in sitting or rising

No isolated biceps for 8 weeks

I. Immediate Motion Phase (0-2 weeks)

#### Goals:

- Re-establish non-painful ROM
- Retard muscular atrophy
- Re-establish dynamic stabilization
- Decrease pain/inflammation

#### A. Week One

## Range of Motion:

- Pendulums
- Rope and pulley (non painful arc of motion)
- L-bar exercises (Elevation in scapular plane and ER/IR beginning at 30 degrees abduction and progressing to 45 degrees abduction

## Strengthening exercises:

- Isometrics-flexion, extension abduction, ER, IR
- Rhythmic stabilization exercises (ER/IR and extension)

## <u>Decrease pain/inflammation</u>:

• Ice, NSAIDS, modalities

#### B. Week Two

- Continue all Rom exercises
- May initiate heat prior to exercise
- Initiate ER/IR with L-bar at 90 degrees abduction
- Progress elevation to full Rom
- Progress isometrics
- Initiate ER/IR tubing at 0 degrees abduction

## II. Immediate Phase (Week 2-6)

#### Goals:

- Regain and improve muscular strength
- Normalize arthrokinematics
- Improve neuromuscular control of the shoulder complex
- Diminish pain



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## Criteria to progress to Phase II:

- 1. Full ROM
- 2. Minimal pain and tenderness
- 3. Good MMT or IR, ER, flexion

## A. Week 2-3

#### Exercises:

- Initiate isotonic program (no weight)
- Shoulder elevation
- Prone rowing
- Prone horizontal abduction
- Sidelying ER
- Shoulder abduction to 90 degrees
- Shoulder extension to neutral
- After one week, provided patient has no pain and proper form, initiate exercise with 1 pound weight
- Normalize arthrokinematics of shoulder complex

#### Continue L-bar ROM

- Elevation in scapular plane
- ER/IR at 90 degrees abduction
- Joint mobilization: Inferior, posterior and anterior glides

#### Decrease pain and inflammation:

- Continue use of modalities, ice as needed
- May use heat prior to exercise program
- C. Week 4-5: Progress to fundamental shoulder exercise program
- III. Dynamic Strengthening Phase (Week 6-12)

#### Goals:

- Improve strength/power/endurance
- Improve neuromuscular control
- Prepare athlete to return to sport

# Criteria to progress to Phase III

- 1. Full non-painful TOM
- 2. No pain or tenderness
- 3. Strength 70% compared to contralateral side



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#### A. Week 6-8

## **Exercises:**

- Continue isotonic program fundamental shoulder
- Progress strengthening exercises
- Continue neuromuscular control exercises for scapular muscles
- Continue endurance exercises

#### Week 9-12

- Continue all exercises
- Initiate isolated biceps isometrics

Return to Activity Phase (13-22)

Goals: Progressively increase activities to prepare for full functional return

Criteria to progress to Phase IV

- 1. Full ROM
- 2. No pain or tenderness
- 3. Satisfactory muscular strength
- 4. Satisfactory clinical exam

#### A. Exercises:

- Continue ROM and strengthening program
- Continue self capsular stretches as needed
- Continue fundamental shoulder exercise program
- Initiate biceps isotonics
- Initiate plyometric activities (2 hand chest pass, side to side throws, soccer throws)
- Initiate sport program (week (10-12) if patient achieves specific criteria
- Initiate one hand plyometric drills (wall dribbles, baseball throws, shovel throws)
- Continue or initiate interval sports program
- Gradually return to overhead activities i.e. sports