



Rehabilitation Following Open/Arthroscopic Biceps Tenodesis

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

Week 1:

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° abduction and progressing to 45° abduction)

Strengthening exercises:

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

Decrease pain/inflammation:

- Ice, NSAIDs, modalities

Week 2:

- Continue all ROM exercises
- May initiate heat prior to exercise
- Initiate ER/IR with L-bar at 90° abduction



- Progress elevation to full ROM
- Progress isometrics
- Initiate ER/IR tubing at 0° abduction

Criteria to progress to Phase II:

- Full ROM
- Minimal pain and tenderness
- Good MMT or IR, ER, flexion

II. IMMEDIATE PHASE (Week 2-6)

Goals:

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

Week 2-3

Exercises:

- Initiate isotonic program (no weight)
- Shoulder elevation
- Prone rowing
- Prone horizontal abduction
- Side lying ER
- Shoulder abduction to 90°
- 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
 - in scapular plane
 - ER/IR at 90° 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



Week 4-5

- Progress to fundamental shoulder exercise program

Criteria to progress to Phase III

- Full non-painful ROM
- No pain or tenderness
- Strength 70% compared to contralateral side

III. Dynamic Strengthening Phase (Week 6-12)

Goals:

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

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 plyometric activities (2 hand chest pass, side to side throws, soccer throws)
- Initiate sport program (Week 10-12, if patient achieves specific criteria)
- Initiate isolated biceps isometrics

Criteria to progress to Phase IV

- Full ROM
- No pain or tenderness
- Satisfactory muscular strength
- Satisfactory clinical exam



IV. **Return to Activity Phase (13-22)**

Goals:

- Progressively increase activities to prepare for full functional return.

Exercises:

- Continue ROM and strengthening program
- Continue self-capsular stretches as needed
- Continue fundamental shoulder exercise program
- Initiate biceps isotonic
- 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