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

Decrease pain/inflammation:

- Ice, NSAIDS, modalities

Week Two

- Continue all Rom exercises
- May initiate heat prior to exercise
- Initiate ER/IR with L-bar at 45 degrees abduction
- Progress elevation to ~145 flexion
- Progress isometrics
- Initiate ER/IR tubing at 0 degrees abduction

II. **Immediate Phase (Week 3-6)**

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

Criteria to progress to Phase II:

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

Week 3-4:**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

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

Week 6-8**Exercises:**

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

Week 10-12

- Continue all exercises
- Initiate plyometric activities (2 hand chest pass, side to side throws, soccer throws) (wk 12)
- Initiate isolated biceps isometrics (week 8)
- Initiate light biceps curls (couple weights) (week 10-12)

IV. Return to Activity Phase (14-22)

Goals: Progressively increase activities to prepare for full functional return

Criteria to progress to Phase IV

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

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