

Biceps Tenodesis

Physical Therapy Protocol

Phase I – Protective Phase (Weeks 0–3)

Goals:

- Protect surgical repair
- Decrease pain and swelling
- Full passive elbow flexion and extension
- Active elbow extension only

Precautions:

- **No active elbow flexion** for first 3 weeks
- **No resisted elbow flexion or supination** for first 6 weeks
- Wear sling or immobilizer at all times except for hygiene

Therapeutic Exercises:

- Gentle wrist and hand range of motion
- Shoulder pendulums and scapular retraction (starting immediately)
- Gentle passive elbow flexion and extension (starting POD 1)
- May initiate active elbow extension as tolerated

Criteria to Progress to Phase II:

- Controlled pain
- Full passive elbow range of motion
- Minimal muscle guarding

Phase II – Early Mobilization Phase (Weeks 3–6)

Goals:

- Begin gentle mobilization of the biceps tendon
- Improve shoulder and scapular mobility
- Develop muscle activation in shoulder stabilizers

Precautions:

- No resisted elbow flexion or supination until 6 weeks post-op
- Sling worn at all times (except hygiene/exercise); begin weaning at week 4

Therapeutic Exercises:

- Initiate shoulder passive and AAROM at week 3
- Gentle joint mobilizations as needed
- Scapular stabilization exercises
- Isometric shoulder and elbow exercises
- Begin active elbow flexion and supination at week 5

Criteria to Progress to Phase III:

- Tolerates prescribed shoulder/elbow AROM
- Minimal residual pain following activity

Phase III – Strengthening Phase (Weeks 6–9)

Goals:

- Reinforce proper scapulohumeral rhythm
- Begin progressive upper extremity strengthening
- Maintain full AROM

Therapeutic Exercises:

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- Full AROM for elbow and shoulder
- Rotator cuff and deltoid strengthening (after 30 pain-free isometric reps)
- Isometric elbow flexion/extension
- Progress to resisted elbow flexion/extension as tolerated

Criteria to Progress to Phase IV:

- Shoulder strength at least 70% of contralateral side
- Good muscle contraction during isometric biceps strengthening
- Full, pain-free elbow and shoulder AROM

Phase IV – Advanced Strengthening Phase (Weeks 9–12)

Goals:

- Advance elbow and shoulder strengthening
- Initiate functional training

Therapeutic Exercises:

- Eccentric strengthening of the upper extremity
- Begin closed chain exercises
- Initiate two-arm plyometric drills

Criteria to Progress to Phase V:

- Strength at least 75% of contralateral side
- Tolerates increased activity without pain or swelling

Phase V – Return to Sport Phase (Weeks 12–24+)

Goals:

- Enhance muscle activation and function

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- Resume advanced functional and sport-specific activity

Therapeutic Exercises:

- Eccentric elbow strengthening
- Push-up progression
- Single-arm plyometrics
- Sport-specific drills and functional training
- **Begin interval throwing program** when all criteria below are met:
 - Strength $\geq 90\%$ of contralateral side
 - Full AROM
 - Completion of Rebounder Circuit (see below)
 - Clearance from physician

Criteria for Full Return to Sport (Approx. 5–6 Months):

- MD clearance
- Completion of interval throwing program
- Equal bilateral strength
- Passed sport-specific testing

Rebounder Circuit (Pre-Throwing Readiness Test)

Using a 1 lb medicine ball with the involved arm:

- Internal rotation toss at side: 2×30
- External rotation toss at side: 2×30
- Forward toss at 90/90 position (concentric): 2×30
- Backward toss at 90/90 position (eccentric): 1×30

Must complete all without residual pain or stiffness prior to start the throwing program