**Post-operative Rehabilitation Protocol**

**Rotator Cuff Repair**

---

**Biceps tenodesis**

Most patients will start PT at 6 weeks post op

Patient will wear a sling for 6 weeks post-op

Unless otherwise specified, do not begin PT until patient has seen MD for 2 week post-op visit.

**If biceps tenodesis – no resisted elbow flexion for 3 months post op**

**PHASE I:**

**Days 0-14**

- May remove sling for gentle pendulum exercise 2-3 times per day.
- Elbow/hand gripping and ROM exercises: perform 4-6 times per day.
- Cryotherapy as needed.

**Weeks 2-4**

- PROM - Flexion to 90°, Abduction to 90°, ER 30°, IR 30°, Extension 30°. (ER/IR in scapular plane, Flexion/extension at 90° flexion in scapular plane)
- Rhythmic stabilization drills.
- Continue all isometric contractions and use of cryotherapy as needed.
- Initiate scapular isometrics.
- Screen posture
- May begin joint mobilizations grade I and II for pain relief/relaxation.

**Weeks 4-5**

- PROM - Flexion to 120°, Abduction to 120°, ER 30°, IR 45°, Extension 30°.
- ER/IR in scapular plane and at 90° abduction.
- Initiate ER/IR strengthening using exercise tubing at 0° of abduction (use towel roll under arm).
- Initiate manual resistance ER in supine in scapular plane (light resistance).
- Progress scapular strengthening.
- Initiate prone rowing with arm at 30° of abduction to neural arm position.
- Initiate prone shoulder extension with elbow flexed to 90°.
- Continue use of ice as needed. May use heat prior to ROM exercises.
- Rhythmic stabilization exercises (flexion at 45°, 90°, 100° and ER/IR at multiple angles).
Weeks 6: Most patients will start PT at 6 weeks post op

- Continue all exercises as above
- Advance PROM in all directions as tolerated.
- Joint mobilizations: gentle scapular/glenohumeral joint mobilization as indicated to regain full PROM.
- AAROM and stretching exercises to gain full motion.
- Shoulder flexion
- ER at 90º abduction.
- Initiate AROM exercises.
- Shoulder flexion in scapular plane to 90º of flexion.
- Shoulder abduction to 90º.
- Progress isotonic strengthening exercise program.
- IR/ER tubing (towel under arm).
- Side-lying ER (towel under arm).
- Prone rowing at 45º abduction.
- Prone horizontal abduction (flexed elbow) at 90º abduction.
- Biceps curls (isotonics with very light resistance).
- Slowly progress strengthening to prevent inflammation of tendon.

Criteria to advance to Phase II:

- Full PROM.
- Flexion PROM: >125º.
- ER PROM in scapular plan to >75º (if uninvolved shoulder PROM >80º).
- IR PROM in scapular plan to >75º (if uninvolved shoulder PROM >80º).
- Abduction PROM to >90º in scapular plane.

PHASE II:

Week 7

- Maintain full ROM in all planes.
- Continue dynamic stabilization drills.
- Progress AROM and light strengthening program with the addition of
  - ER/IR tubing
  - Lateral raises to 90º of abduction*
  - Full can in scapular plan to 90º elevation*
  - Prone extension
  - Prone serratus punch.
  - Elbow flexion and extension
  - *Must be able to elevate arm without shoulder or scapular hiking before initiating isotonics; if unable, continue dynamic rhythmic stabilization glenohumeral joint exercises.*
  - Progress joint mobilizations to grades III and IV to address capsular restrictions as indicated for all shoulder girdle joints.

Weeks 8-9

- Continue as above
- Initiate light functional activities if physician permits
- In pain free ROM; starting at waist level activities, progression to shoulder level activities, then
overhead activities.

Week 10
- Continue with all exercises listed above.
- Progress to fundamental shoulder exercises.
- Strengthening Exercises: addition of the following
  - Standing lateral raise to 90º
  - Prone Horizontal Abduction – T’s.
  - Prone Scaption – Y’s.
  - Initiate isotonic resistance (0.5kg weight) during flexion and abduction if patient exhibits non-painful normal motion without substitution patterns.

Weeks 11-14
- Progress all exercises.
- Continue ROM and flexibility exercises.
- Stretch posterior capsule with cross body adduction stretching.
- Progress strengthening program (increase 0.5kg/10 days if non-painful).
- No residual pain should be present following exercises.
- May begin gradual biceps strength if biceps tenodesis

Criteria to advance to Phase III:
- Full AROM and PROM.
- Pain free with all strengthening exercises.
- Dynamic shoulder stability.

PHASE III:

Weeks 15-20
- Continue ROM and stretching to maintain full ROM.
- Self-capsular stretches
- Sleeper stretch
- Behind the back IR with towel
- Cross body stretch
- Doorway ER stretch
- Progress shoulder strengthening exercises

Fundamental shoulder exercises including:
- Diagonals with resistance band in D2 pattern.
- Push up plus on wall (progress to floor).
- Dynamic hug with band.
- IR at 90º with band.
- Standing forward punch with band.
- ER (supported and unsupported at 90º) with weight or band.
- Biceps curls

Weeks 20-24
- Continue all exercises listed above.
- Gradually increase resistance (patient should not exhibit pain during or after exercise and no substitution pattern).
Criteria to advance to Phase IV:
- Maintenance of full pain-free ROM.
- Functional use of upper extremity.
- Full muscular strength and power.

**PHASE IV: Return to Activity Phase (Weeks 24-36)**

Weeks 24-26
- Continue fundamental shoulder exercise program (at least 4 times weekly).
- Continue stretching if motion is tight.
- Continue progression to sport and/or work activity/participation.