



Rotator Cuff Protocol for Large-Massive Tears

Surgery Date: _____

This protocol uses the same components as that for small to medium tears but introduces most of them at later stages. The course is much slower post-operatively with more precaution to protect the repair.

Candidates for Protocol

- Large to massive tear
- Poor tissue quality
- Tenuous repair

Goals:

- Maintain integrity of the repair
- Gradually increase passive ROM
- Diminish pain and inflammation
- Prevent muscular inhibition

Precautions

- Maintain arm in sling
- No lifting of objects
- No excessive shoulder extension
- No excessive stretching or sudden movements
- No supporting of body weight by hands
- Keep incision clean and dry
- BICEPS TENODESIS: No resisted elbow flexion / forearm supination for 6 weeks
- Avoid shoulder horizontal adduction, extension and hand behind back until 12 wks post-op

Phase 1: Immediate Post-Surgical Phase (wk 1-3)

Date: _____

- Sling or abduction brace (physician's decision)
- Pendulums (passive, small amplitude movements)
- Table Walks
- *Table slide passive flexion and scaption (seated, arm resting on table with passive shoulder movement produced by trunk flexion/side bending)
- Active scapular protraction and depression (limit retraction and elevation)
- Passive ROM (**being sensitive to end feel and muscle guarding**)
 - Flexion to 90 degrees
 - Scaption (scapular plane) to 90 degrees
 - *External and internal rotation in 30 degrees of scaption (scapular plane), no >30 degrees of rotation in either direction
- Hand gripping/wrist AROM/PRES with involved arm supported; forearm and elbow AROM if no biceps tenodesis

- Cryotherapy for pain and inflammation (ice 15-20 min every waking hour) Sleep in sling until physician DCs

Phase 2: Protection Phase (Wks 4-8)

Date: _____

- **Continue all of the above**
- Progress **passive ROM (being sensitive to end feel and muscle guarding)**
 - Flexion to at least 105 degrees slowly progressing to at least 75% of normal PROM by 8 wks post-op
 - Scaption to at least 105 degrees slowly progressing to at least 75% of normal PROM by 8 wks post-op
 - External rotation in scapular plane no >45° initially, then slowly progressing to at least 75% of normal PROM by 8 wks post-op
 - Internal rotation in scapular plane to no >35 degrees initially, then slowly progressing to 75% of normal PROM by 8 wks post-op
- Begin active scapular elevation and retraction progressing to full scapular AROM
- Sleep in sling until physician DCs

Phase 3: Intermediate Phase (Wks 8-12)

Date: _____

- **Begin active-assisted ROM** (T-bar, manual)
 - Supine external and internal rotation in scapular plane progressing to full AROM
 - Supine flexion to tolerance
 - Pulley flexion and scaption
 - UBE AA/AROM (no resistance)
- **Begin active** side lying scaption and external rotation progressing to full AROM
- **Begin standing active** flexion and scaption, initially with elbow flexed to shorten lever arm to 90 degrees elevation, then progressing to full AROM

- **Begin** prone AROM, to patients tolerance, at **12 wks post-op** (horizontal abduction, flexion/extension, rowing)
- **Begin submax/pain-free isometrics of non-involved tendons (elbow at side) ****
 - Flexion with bent elbow
 - Extension with bent elbow
 - Abduction with bent elbow
 - External and Internal Rotation
 - Elbow flexion
- **Continue** elbow/hand/wrist PREs with involved arm supported
- **Continue passive stretching with particular attention to posterior capsule**
- **Begin** hand-behind-back AAROM, AROM, and stretching at 12 wks post-op

- Racquet sport tasks
- Basketball/volleyball tasks

***Hold for Dr Sanders**

*** For Dr Sanders keep shoulder at 0 degrees of scaption**

****TDB pts: Hold resistive strengthening until week 12**

Phase 4: Light Strengthening Phase (Wks 13-20)

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- Begin light resistance adding isometrics of involved tendons, progressing to isolated AROM against gravity, then isotonic resistance
 - Rhythmic stabilization in supine with **proximal hand placements** initially
 - Resisted internal and external rotation in side lying, supine scapula protraction (punches), prone extension and rowing
 - Elastic bands for external rotation, internal rotation, extension, scapula retraction, and scapula protraction, supine scaption
 - Elevation in the scapular plane with thumb up (open can). Do not add resistance, in standing, if pt is unable to elevate arm without substitution patterns
 - Closed-chain exercise such as wall push-ups, quadruped wt. bearing activities
 - Conservatively progress to PNF patterns
 - Progress to perturbation/dynamic stabilization drills with ball, body blade, etc.
 - Progress to advanced stretching with emphasis on posterior shoulder capsule
 - Progress resistance with dumbbells and elastic bands in all planes of the shoulder and scapula
 - Progress closed-chain and dynamic stabilization drills (table push-ups, fitter, etc)

Phase 5: Work/Sport Specific Phase (Wks 21-30)

Date: _____

- Add plyometrics (light medicine ball toss, rebounder, wall push-up, seal slap, etc.)
 - Incorporate work/sport simulation drills into strength, endurance, flexibility, dynamic stabilization, and plyometric exercises, for example:
 - Material handling tasks
 - Graduated throwing program
 - Overhead work tasks
 - Repetitive reaching tasks
 - Pulling/pushing tasks