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

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

• Cryotherapy for pain and inflammation (ice 15-20 min every waking hour) Sleep in sling until physician DCs
• 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) **
  o Flexion with bent elbow
  o Extension with bent elbow
  o Abduction with bent elbow
  o External and Internal Rotation
  o 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

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

• Begin light resistance adding isometrics of involved tendons, progressing to isolated AROM against gravity, then isotonic resistance
  o Rythmic stabilization in supine with proximal hand placements initially
  o Resisted internal and external rotation in side lying, supine scapula protraction (punches), prone extension and rowing
  o Elastic bands for external rotation, internal rotation, extension, scapula retraction, and scapula protraction, supine scaption
  o 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
  o Closed-chain exercise such as wall push-ups, quadruped wt. bearing activities
  o Conservatively progress to PNF patterns
  o Progress to perturbation/dynamic stabilization drills with ball, body blade, etc.
  o 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.)
  o Incorporate work/sport simulation drills into strength, endurance, flexibility, dynamic stabilization, and plyometric exercises, for example:
    o Material handling tasks
    o Graduated throwing program
    o Overhead work tasks
    o Repetitive reaching tasks
    o Pulling/pushing tasks

  o Racquet sport tasks
  o 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