

## ROTATOR CUFF REPAIR - LARGE/MASSIVE - SUMMARY

### General Program Outline

**ROM:** Emphasis on PROM initially. Add AAROM supine ER at wk 2. Add AAROM elevation at wk 4. Add AROM elevation at wk 6 with emphasis on avoiding shoulder shrug. Goal of functional ROM 10-12 wks

**Muscle Activation:** Important to prevent reflex disassociation, maintain muscle tone, and prevent muscle atrophy. Initiate with sub-max, pain-free isometrics and AROM as outlined in the protocol.

**Strengthening:** No aggressive strengthening for 12 wks. Goal of 85-90% strength by 5-6 months. Patients should continue with strength training for at least 1 year post-op to maximize outcome.

### ROM goals to achieve / not to exceed

|                           | 0-2 wks       | 2-4 wks                        | 4-6 wks               | 6-8 wks               | 8-10 wks          | 10-12 wks         |
|---------------------------|---------------|--------------------------------|-----------------------|-----------------------|-------------------|-------------------|
| Flexion / scaption        | Per tolerance | Per tolerance (at least 0- 90) | Per tolerance (0-110) | Per tolerance (0-130) | Unlimited (0-150) | Unlimited (0-170) |
| Abduction                 | 0-45 deg      | 0-60 deg                       | 0-75 deg              | 0-90 deg              | 0-120 deg         | 0-150 deg         |
| ER in scapular plane      | 0-20 deg      | 0-40 deg                       | 0-50 deg              | 0-60 deg              | 0-70              | 0-80 deg          |
| IR (GH) in scapular plane | To chest      | To chest                       | 0-20 deg              | 0-40 deg              | 0-60 deg          | 0-70 deg          |
| ER at 60 ABD              | None          | Initiate at wk 3. 0-20 deg     | 0-40 deg              | 0-50 deg              | Not applicable    | Not applicable    |
| ER at 90 ABD              | None          | None                           | None                  | 0-40 deg              | 0-60 deg          | 0-70 deg          |
| IR at 90 ABD              | None          | None                           | None                  | 0-20 deg              | 0-45 deg          | 0-60 deg          |
| Extension                 | Neutral       | Neutral                        | Neutral               | 0-20 deg              | 0-40 deg          | 0-55 deg          |

**Rotator Cuff Repair – Large/Massive  
Treatment Interventions**

| Phase I: 0-6 weeks   | Phase II: 6-8 weeks   | Phase III: 8-12 wks  | Phase IV: 12+ wks  |
|--|---|--|--|
| <p>Warm up: Pendulum or Hot pack</p> <p>Emphasis on GH passive range of motion as outlined above. AAROM ER in scapular plane at wk 4. Gentle IR PROM in scaption at wk 4. No AROM</p> <p>GH Mobilizations (in scapular plane) grade I/II for pain or muscle spasm</p> <p>Thoracic spine P-A mobilizations as needed. 0-2 wks: seated. 2-4wks:Progress to prone as tolerated</p> <p>Postural education: Avoid forward head/rounded shoulders</p> <p>Active scapular retraction, scapular depression in neutral position</p> <p>Scapular PROM in sidelying (if needed). Manual resisted scapular isometrics</p> <p>AROM elbow, wrist, hand. Gripping activities without lifting</p> <p>Cryotherapy. IFC if indicated</p> | <p>Warm up: Passive Pendulum or Hot pack or AAROM on Nustep</p> <p>Low-load long duration end-range stretch at wk 7 (if necessary) using wand and hot pack in supine for ER</p> <p>GH Mobilizations grade I/II for pain, III/IV to increase joint mobility</p> <p>Thoracic spine P-A mobilizations</p> <p>Facilitate Thoracic extension: stretch in sitting with/without overpressure (ball / towel roll/ foam roller)</p> <p>PROM with end range stretching as outlined above</p> <p>AAROM as outlined above: Pulleys, wand exercises, ball rolling on table</p> <p>Aquatics</p> <p>Postural education: Avoid forward head/rounded shoulders</p> <p>Active scapular protraction, retraction to neutral, scapular depression</p> <p>Scapular manual RROM in sidelying</p> <p>AROM elbow, wrist, hand</p> <p>Cryotherapy. IFC if indicated</p> | <p>Active warm-up: UBE with no resistance, add light resistance wk 9</p> <p>Low load long duration end-range stretch (if necessary)</p> <p>GH Mobilizations<br/>PROM with end range stretch</p> <p>Therapeutic exercises:<br/>AAROM: Pulleys, wand. Add in ext past neutral wk 7, Add in gentle IR behind the back stretch wk 10</p> <p>AROM:<br/>GH: All motions, emphasize quality movement. Focus on endurance (30 reps)<br/>Scapula: (light resistance of &lt;5 lbs with emphasis on endurance)<br/>protraction, retraction<br/>rows to neutral, depression<br/>* 4 keys exercises (max LT/MT, inh UT)<br/>sidelye ER                      sidelye flexion<br/>prone hor abd with ER   prone extension</p> <p>Muscle activation:<br/>Sub-max pain-free GH isometrics<br/>Supported Biceps / Triceps isotonics, unsupported wk 10<br/>Rhythmic stabilization sub-max<br/>Wk 8: supine arm supported ER/IR<br/>wk 10-12: supine flexion 90 deg, low load CKC (&lt;BW) ie: ball on table</p> <p>Encourage thoracic extension</p> <p>Ice (in stretch if needed) 15 minutes<br/>E Stim (IFC or NMES) if necessary</p> | <p>Active warm-up: UBE, rower</p> <p>ROM activities as necessary</p> <p>Scapulo-thoracic strengthening:<br/>chest press (+), rows in full ROM, press down, scaption<br/>prone hor abd in neutral rotation, prone ext with ER,<br/>prone hor abd with ER<br/>prone full can, dynamic hug,<br/>serratus punch 120 deg,<br/>lat pull downs (wk 16)</p> <p>GH/RTC strengthening:<br/>flexion, scaption, press down,<br/>prone hor abd w/ ER<br/>sidelying ER, isotonic IR/ER, progress to 90/90 wk 16 if needed<br/>isokinetic IR/ER, progress to 90/90 wk 16 if needed</p> <p>Total arm strengthening: Triceps extensions, biceps curls</p> <p>PNF patterns</p> <p>Proprioceptive/Kinesthesia activities:<br/>rhythmic stabilizations, body blade</p> <p>CKC exercises: sub-max BW:<br/>quadraped (euroglide / cuff link), wall push-ups. Progress to full BW (wk 16-18): partial prone walk-outs, full prone walk-outs</p> <p>Plyometrics: bilateral progress to unilateral<br/>Cryotherapy<br/>E stim, biofeedback if necessary</p> |