

REVERSE TOTAL SHOULDER ARTHROPLASTY

Physical Therapy, Strength and Conditioning

PHASE I – MAXIMUM PROTECTION (WEEKS 0 to 4)

Goals

- Reduce inflammation
- Decrease pain
- Postural education

Exercise Progression

- Ultrasling x 2 weeks
- Ice and modalities to reduce pain and inflammation.
- Cervical ROM and basic deep neck flexor activation (chin tucks).
- Instruction on proper head neck and shoulder (HNS) alignment.
- Active hand and wrist range of motion.
- Active shoulder retraction
- PROM—gradual progression to full.
- Encourage walks and low intensity cardiovascular exercise to promote healing.

Manual Intervention

- STM—global shoulder and CT junction.
- Scar tissue mobilization when incisions are healed.
- Graded GH mobilizations.
- ST mobilizations.

PHASE II: PROGRESSIVE STRETCHING AND ACTIVE MOTION (WEEKS 2-6)

Goals

- Discontinue sling
- Postural education.
- Focus on posterior chain strengthening.
- Begin AROM—full all planes
- Increase ROM as tolerated

Exercise Progression

- Progress to full range of motion flexion and external rotation as tolerated.
Use a combination of wand, pulleys, wall walks or table slides to ensure compliance.
- Gradual introduction to internal rotation using shoulder extensions (stick off back).
- Serratus activation; Ceiling punch (weight of arm) many initially need assistance.
- Scapular strengthening—prone scapular series (rows and I's). Emphasize scapular strengthening under 90°.
- External rotation on side (no resistance).
- Submaximal isometrics

- Cervical ROM as needed to maintain full mobility.
- DNF and proper HNS alignment with all RC/SS exercises.
- Low to moderate cardiovascular work. May add elliptical and running.

Manual Intervention

- STM—global shoulder and CT junction.
- Scar tissue mobilization.
- Graded GH mobilizations.
- ST mobilizations.
- Gentle CR/RS to gain ROM while respecting repaired tissue.

PHASE III: STRENGTH TRAINING (WEEKS 6 TO 12)

Goals

- Gradual progression ROM all planes as tolerated.
- Attempt to normalize GH/ST arthrokinematics.
- Activate RC/SS with isometric and isotonic progression.
- Continue to emphasize posterior chain strengthening but introduce anterior shoulder loading.

Exercise Progression

- Passive and active program gradually pushing for maximum flexion and external rotation.
- Continue with stick off the back, progressing to internal rotation with thumb up back.
- Add resistance to ceiling punch.
- Sub-maximal rotator cuff isometrics.
- Advance prone series to include T's or at 45° as tolerated.
- Add rows with weights or bands.
- Supine chest-flys providing both strength and active anterior shoulder stretch.
- Supine PNF patterns through available range.
- Biceps and triceps PRE.
- Scaption; normalize ST arthrokinematics.
- 10 weeks; add quadruped or counter weight shift. Therapist directed RS and perturbations in quadruped – bilateral progressing to unilateral-tri pod position.

Manual Intervention

- STM and Joint mobilization to CT junction, GHJ and STJ as needed.
- CR/RS to gain ROM while respecting repaired tissue.
- Manual perturbations.
- PNF patterns.