Rotator Cuff Repair with Biceps Release/Tenodesis

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PHASE I- MAXIMUM PROTECTION (WEEKS 0 TO 6)

Phase I – Maximum Protection (Weeks 0 to 6)

Goals:

- Reduce inflammation
- Decrease pain
- Postural education
- PROM as instructed

Restrictions/Exercise Progression:

- Sling x6 weeks – Ultrasling x4-6 weeks, larger tears may be Ultrasling x6 weeks then regular sling for 2 additional 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.
- Passive biceps x6 weeks (AAROM; no release or tenodesis).
- Active shoulder retraction.
- Passive range of motion (gradual progression starting at 4 weeks).
    - **No motion** x4 weeks.
    - Flexion 0-90 degrees from weeks 4-6, then full.
    - External rotation 0-30 degrees weeks 4-6, then full.
    - Avoid internal rotation (thumb up back) until 8 weeks post-op.
- 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 I- Weeks 0 to 2
- Splint/ACE wrap is placed at the time of surgery; keep clean and dry at all times until post-op appointment.
- Ice the wrist and base of the thumb for 20 minutes, three to four times a day.
- We recommend 1000mg of Tylenol 3 times per day for the first 7 days after surgery.
    - Ibuprofen 800mg (or other anti-inflammatory as tolerated) 3 times a day after surgery.
- Bend your fingers into a full fist 10 times an hour while awake to reduce finger stiffness
- NO lifting over 2lbs with the operative hand.

PHASE II- PROGRESSIVE STRETCHING AND ACTIVE MOTIVATION (WEEKS 6 TO 8

Goals:

- Discontinue sling except as instructed with large or massive tears.
- Postural education.
- Focus on posterior chain strengthening.
- Begin AROM.
- P/AAROM:
    - Flexion 150 degrees+
    - 30-50 degrees ER @ 0 degrees abduction
    - 45-70 degrees ER @ 70-90 degrees abduction

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 degrees.
- External rotation on side (no resistance).
- Gentle therapist directed CR, RS and perturbations to achieve ROM goals.
- 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 but no 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- STRENGTHENING PHASE (WEEKS 8 TO 12)

Goals:

- 90% passive ROM, 80-90% AROM by 12 weeks. Larger tears and patients with poor tissue quality will progress more slowly.
- Normalize GH/ST arthrokinematics.
- Active RC/SS with isometric and isotonic progression.
- Continue to emphasize posterior chain strengthening but introduce anterior shoulder loading.

Exercise Progression:

- Passive and active program pushing for full flexion and external rotation.
- Continue with stick off the back progressing to internal rotation with thumb up back and sleeper stretch.
- Add resistance to ceiling punch.
- Submaximal rotator cuff isometrics (no pain).

- Advance prone series to include T's.
- Add rows with weights or bands.
- Supine chest-flys providing both strength and active anterior shoulder stretch.
- Supine (adding weight as tolerated) progressing to standing PNF patterns.
- Seated active ER 90/90.
- Biceps and triceps PRE.
- Scaption; normalize ST arthrokinematics.
- 10 weeks – add quadruped or counterweight 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.

PHASE IV- ADVANCED STRENGTHENING AND PLYOMETRIC DRILLS

PRE/PSE (Weeks 12-20):

- Full range of motion all planes – emphasize terminal stretching with crossarm, TUB, triceps, TV, sleeper and door/pec stretch.
- Begin strengthening at or above 90 degrees with prone or standing Y's, D2 flexion pattern and 90/90 as scapular control and ROM permit. Patient health, physical condition and goals/objectives will determine if strengthening program; very gradual progression with pressing and overhead activity.
- Continue with closed chain quadruped perturbations; add open chain as strength permits.
- Progress closed kinetic chain program to include push-up progression beginning with counter, knee, then to gradual progression to full as appropriate.

RTS Program (Weeks 20-24):

- Continue to progress RC and scapular strengthening program as outlined.
- Advance gym strengthening program.
- RTS testing for interval programs (golf, tennis, etc). Microfet testing as appropriate.
- Follow-up examination with the physician (6 months) for release to full activity.

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.

Please have Physical Therapy call Dr. Honstad with any questions at (952) 442-2163.