Rotator Cuff Repair with Biceps Tenotomy/Tenodesis

Post-Operative Protocol

Phase I – Maximum Protection (Weeks 0 to 6):

- **Goals:**
  - Reduce inflammation
  - Decrease pain
  - Postural education
  - PROM as instructed

- **Restrictions/Exercise Progression:**
  - Sling for 6 weeks per Dr. Bjerke’s instructions
    - Patients will be placed into an UltraSling post-operative (sling with the pillow)
  - 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 alignment
  - Active hand and wrist ROM
  - Passive biceps x6 weeks (AAROM; no tenotomy or tenodesis)
  - Active shoulder retraction
  - Shoulder PROM progression
    - No motion x2 weeks
    - Passive flexion 0°-90° from weeks 2-4, then full
    - External rotation 0°-30° from weeks 2-4, then full
    - Avoid internal rotation (thumb up back) until 8 weeks post-op
  - Encourage walks and low intensity cardiovascular exercises to promote healing

- **Manual Intervention:**
  - Soft tissue massage- global shoulder and CT junction
  - Scar tissue mobilization when incisions are healed
  - Graded GH mobilizations
  - ST mobilizations

Phase II – Progressive Stretching and Active ROM (Weeks 6 to 8):

- **Goals:**
o Discontinue sling as instructed
o Postural education
o Focus on posterior chain strengthening
o Begin AROM

PROM/AAROM:
  ▪ Flexion 150°+
  ▪ 30°-50° ER @ 0 abduction
  ▪ 45°-70° ER at 70-90 abduction

- **Exercise Progression:**
  o 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.
  o Gradual introduction to internal rotation shoulder extensions (stick off back)
  o Serratus activation; ceiling punch (weight of arm) may initially need assistance
  o Scapular strengthening – prone scapular series (rows and I's)
    ▪ Emphasize scapular strengthening under 90°
  o External rotation on side (no resistance)
  o Gentle therapist directed CR, RS and perturbations to achieve ROM goals
  o Cervical ROM as needed to maintain full mobility
  o DNF and proper postural positioning with all RC/SS exercises
  o Low to moderate cardiovascular work
    ▪ May add elliptical but no running

- **Manual Intervention:**
  o Soft tissue mobilization- global shoulder and CT junction
  o Scar tissue mobilization
  o Graded GH mobilization
  o ST mobilization
  o Gentle CR/RS for ROM while respecting repaired tissue

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**Phase III – Strengthening Phase (Weeks 8 to 12):**

- **Goals:**
  o 90% passive ROM, 80-90% AROM by 12 weeks
    ▪ Larger tears and patients with poor tissue quality will progress more slowly
  o Normalize GH/ST arthro-kinematics
  o Activate RC/SS with isometric and isotonic progression
  o Continue to emphasize posterior chain strengthening but introduce anterior shoulder loading

- **Exercise Progression:**
  o 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
- Sub-maximal 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 at 90/90
- 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

**Phase IV – Advance Strengthening and Plyometric Drills:**

**PRE/PSE (Weeks 12-20):**
- Full range of motion all planes – emphasize terminal stretching with cross arm, TUB, triceps, TV, sleeper and door/pec stretch
- Begin strengthening at or above 90° with prone or standing Y’s, D2 flexion pattern and 90/90 as scapular control and ROM permit
  - Patient health, physical condition and goals/objective will determine if strengthening above 90° is appropriate
- Add lat pulls to gym 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 – gradual progression to full as appropriate
- Initiate plyometric and rebounder drills as appropriate

**Return to Sports 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.) using microfet dynamometer
- 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 feel free to contact Dr. Brian Bjerke’s office with any questions or concerns. Dr. Bjerke’s care coordinator Andria Larson is available by phone at 952-456-7095.*