TWIN CITIES ORTHOPEDICS

Brian Bjerke, MD

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:

    - Discontinue sling as instructed
    - Postural education
    - Focus on posterior chain strengthening
    - Begin AROM
    - PROM/AAROM:
        - Flexion 150°+
        - 30°-50° ER @ 0 abduction
        - 45°-70° ER at 70-90 abduction
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- 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 shoulder extensions (stick off back)
    - Serratus activation; ceiling punch (weight of arm) may initially need assistance
    - Scapular strengthening – prone scapular series (rows and l's)
        - Emphasize scapular strengthening under 90°
    - 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 postural positioning with all RC/SS exercises
    - Low to moderate cardiovascular work
        - May add elliptical but no running
- Manual Intervention:
    - Soft tissue mobilization- global shoulder and CT junction
    - Scar tissue mobilization
    - Graded GH mobilization
    - ST mobilization
    - Gentle CR/RS for 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 arthro-kinematics
    - 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 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.