ANDREWS INSTITUTE
ORTHOPAEDICS & SPORTS MEDICINE
An Affiliate of Baptist Health Care

TYPE I ROTATOR CUFF REPAIR (1 cm or less) ARTHROSCOPIC ASSISTED

GENERAL GUIDELINES / PRECAUTIONS

- Have patient wear sling at all times except showering and while doing exercises / physical therapy for 4 weeks or per physician's discretion.
- No exercises specifically for the shoulder while a pain pump is present.
- Once the sling is removed it is necessary to stress the importance of avoiding heavy lifting, pushing, or pulling by the patient for 6 months to allow proper tissue healing.
- This protocol, as well as most others, is a general guideline. Patients should not be progressed to the next phase until they demonstrate proper form with all activities and all criteria are met in the current phase.
- Perform manual therapy and ROM/strengthening exercises to tolerance only without significant increases in pain/soreness. It is important to keep soft tissue healing time frames in mind.
- When clinically appropriate, properly assess the whole body and incorporate treatment for loss of mobility and stability. Not doing so can prevent optimal outcomes and increase risks of future injuries.

MAXIMUM PROTECTION PHASE (Days 1-14)

- **Goals:**
  - Protect repair and promote healing.
  - Diminish pain and inflammation.
  - Gradually increase passive range of motion
  - Minimize muscle atrophy

- **Precautions**
  - No resisted lifting, pulling, or pushing motions
  - Avoid excessive stretching or sudden movements
  - Keep incisions dry and clean

- **Treatment (Days 1-7)**
  - Pendulum exercises (4-6 x daily)
  - Elbow/hand ROM and gripping exercises.
  - Active scapular control exercises in sling
  - Gentle, pain-free ROM:
    - Passive IR/ER in scapular plane
    - Passive flexion
  - Rhythmic stabilization drills for ER/IR with elbow supported in scapular plane
  - Gentle AAROM exercises
    - T-bar ER/IR with elbow supported in scapular plane
  - Sub-maximal, non-painful isometrics
    - Flexion
    - IR/ER
  - Cryotherapy (3-4 x daily), modalities as indicated.

- **Treatment (Days 8-14)**
  - Continue pendulums and shoulder isometrics
  - PROM to tolerance
    - Goals by end of week 2
      - Passive flexion to at least 150 degrees
      - Passive ER at 90 deg ABD to at least 75-80 degrees
      - Passive IR at 90 deg ABD to at least 55-60 deg
  - Progress AAROM Exercises
    - T-bar ER/IR at 90 deg ABD
    - Begin T-bar flexion to tolerance with PT assistance
    - Pulley flexion in scapular plane
  - Continue rhythmic stabilization drills
    - ER/IR in scapular plane
    - All directions at 100 deg flexion
  - Initiate prone scapular strengthening exercises
    - Scapular retraction and prone rows
  - Initiate ER/IR with tubing if AROM allows progression

MODERATE PROTECTION PHASE (Weeks 3-6)

- **Goals:**
  - Continue to protect healing tissues
  - Diminish pain and inflammation
  - Range of Motion:
    - Full PROM by Week 3
    - Full AROM by Week 6
  - Restore dynamic shoulder stability

- **Treatment (Days 15-28)**
  - Continue all previous exercises as needed
  - Progress rhythmic stabilization drills to more challenging ranges
  - Progress scapular stability program
  - Initiate:
    - Upper Body Ergometer
    - Isotonic side-lying external rotation
    - Isotonic prone extension
    - Aquatic program (Week 3: if incisions are well-healed)
  - Continue use of cryotherapy.

- **Treatment (Week 5)**
  - Continue all previous AROM and AAROM exercises as needed to maintain ROM
  - May begin to work on gentle behind the back stretches to tolerance
  - Progress isotonic strengthening program
    - Prone or side-lying horizontal abduction
    - Standing Scaption
      - Patient must not demonstrate scapular hiking to progress forward scaption
    - Biceps Curls

INTERMEDIATE STRENGTHENING PHASE (Weeks 6-12)

- **Goals:**
  - Gradual restoration of shoulder stability, strength and power
  - Gradually return to functional activities as permitted by physician
    - Ex: Jogging program, modified gym program with shoulder safety as primary concern

- **Criteria to Progress**
  - Full pain-free AROM
  - 4/5 pain-free MMT in all ranges
  - Pain-free IADL performance

- **Treatment (Weeks 6-10)**
  - Continue all stretching and ROM activities in order to main full, functional mobility
  - Increase resistance for exercises listed in phase II
  - Initiate:
    - Progressive closed-kinetic chain stability exercises
    - Static carry variations (i.e., farmer's carry, suitcase carry)

- **Treatment (Weeks 11-12)**
  - Continue all previous strengthening exercises as needed
  - Progress home exercise and gym program and schedule formal physical therapy 1-2 x per week
  - Progress closed-kinetic chain exercises for appropriate candidates
  - Interval Golf Program
    - Golfers may putt, chip, and pitch during this phase (MD discretion)

ADVANCED STRENTHENING PHASE (week 13-20)

- **Criteria to Progress:**
  - Pain-free functional AROM required for previous activities
  - Pain-free 5/5 manual muscle testing

- **Goals:**
  - Maintain full, functional AROM
  - Improve muscular strength, endurance, and power.
  - Gradually return to more demanding functional activities.

- **Treatment (Weeks 13-20)**
  - Continue ROM and stretching exercises to maintain full ROM including self-capsular mobilizations as needed
  - Continue to progress to advanced strengthening exercises
  - Initiate
    - UE plyometric program for overhead and contact athletes
    - May initiate interval throwing program upon successful completion of pain-free plyometric progression

DISCHARGE TESTING / PLANNING (Month 6 to 9)

- Based on a patient's age, sex, specific sport / activity, and level (i.e. recreational, amateur, professional) that they are returning to, a decision is made to endorse their return to sport or to ask that the patient refrain from doing so. Currently we strive for the following criteria before fully endorsing going back to rigorous activities:
    - Demonstrate quality and symmetrical movement throughout the body evaluated with comprehensive movement screen or assessment process
    - Symmetrical and acceptable comprehensive scores on CKC UE testing
- Biomechanical assessment of their performance helps safe return to sport / higher level activity. Patient's may be videoed and analyzed doing activities such as throwing or hitting to see if sound body mechanics are being utilized.
- Not all patients who have undergone Type 1 RCR are candidates for functional testing. Those undergoing these tests should be chosen with proper consideration given to what they plan to return to and there general fitness level.
- No matter how well a patient is doing with return to sport testing it is prudent to remember how important time is to full healing and safe return to sport / activity.
- Often times, patients are scheduled periodically during the phase in which they are trying to return to sport / higher level activities to assess their progress and properly change their program until they are deemed safe to return to all activities.