

Atte Sports Ortho Consults Office: (754) 356-8300 Fax: (833) 954-4041

# **Arthroscopic Rotator Cuff Repair Protocol:**

The intent of this protocol is to provide the therapist with guidelines of the post-operative rehabilitation course. It should not be a substitute for one's clinical decision making regarding the progression of a patient's postoperative course based on their physical exam findings, individual progress, and/or the presence of post-operative complications. The therapist should consult the referring physician with any questions or concerns.

# Phase I – Immediate Post Surgical Phase (Weeks 1-4):

Goals:

- Maintain integrity of repair
- Diminish pain and inflammation
- Prevent muscular inhibition
- Independent with ADL's with modifications while maintaining the integrity of the repair

Precautions:

- No active range of motion (AROM) of Shoulder
- Maintain arm in sling, remove only for exercise
- No lifting of objects
- No shoulder motion behind back
- No excessive stretching or sudden movements
- No supporting of body weight by hands
- Keep incision clean and dry

Criteria for progression to the next phase (II):

• Passive range of motion (PROM) Flexion to at least 100 degrees

- PROM ER in scapular plane to at least 45 degrees
- PROM IR in scapular plane to at least 45 degrees
- PROM Abduction to at least 90 degrees in the scapular plane

#### **DAY 1 TO 6:**

- Abduction brace / sling
- Sleep in brace / sling
- Begin scapula musculature isometrics / sets; cervical ROM
- Patient education: posture, joint protection, positioning, hygiene, etc.
- Cryotherapy for pain and inflammation -Day 1-2: as much as possible
  - -Day 3-6: post activity, or for pain

# DAY 7 TO 28:

- Continue use of brace / sling
- Pendulum Exercises (to begin 21 days after surgery, no pendulums before this time)
- Start passive ROM to tolerance (at 21 days) -Flexion
  - -Flexion
  - -Abduction in the scapular plane
  - -ER in scapular plane
  - -IR in scapular plane
- Continue Elbow, wrist, and finger AROM / resisted
- Cryotherapy as needed for pain control and inflammation

#### Phase II – Protection Phase (Week 4-10):

Goals:

- Allow healing of soft tissue
- Do not overstress healing tissue
- Gradually restore full passive ROM (week 4-5)
- Decrease pain and inflammation
- Precautions:
- No lifting
- No supporting of body weight by hands and arms
- No excessive behind the back movements
- No sudden jerking motions

Criteria for progression to the next phase (III):

• Full AROM

#### WEEK 5-6:

- Continue use of brace / sling full time until end of week 5
- Between weeks 5 and 6 may use brace / sling for comfort only
- Discontinue brace / sling at end of week 6
- Initiate active assisted range of motion (AAROM) flexion in supine position
- Progressive passive ROM until approximately Full ROM at Week 4-5.
- This ROM should be PAIN FREE

- Gentle Scapular/glenohumeral joint mobilization as indicated to regain full passive ROM
- Continue previous exercises in Phase I as needed
- Continue all precautions
- Initiate prone rowing to neutral arm position
- Continue cryotherapy as needed
- May use heat prior to ROM exercises
- May use pool (aquatherapy) for light ROM exercises
- Ice after exercise

#### WEEK 6-8:

- Continue AAROM and stretching exercises
- Begin rotator cuff isometrics
- Initiate active ROM exercises -Shoulder flexion scapular plane -Shoulder abduction

#### Phase III – Intermediate phase (week 10-14):

Goals:

- Full AROM (week 10-12)
- Maintain Full PROM
- Dynamic Shoulder Stability
- Gradual restoration of shoulder strength, power, and endurance
- Optimize neuromuscular control Gradual return to functional activities Precautions:
- No heavy lifting of objects (no heavier than 5 lbs.)
- No sudden lifting or pushing activities
- No sudden jerking motions

Criteria for progression to the next phase (IV):

- Able to tolerate the progression to low-level functional activities
- Demonstrates return of strength / dynamic shoulder stability
- Re-establish dynamic shoulder stability
- Demonstrates adequate strength and dynamic stability for progression to higher demanding work/sport specific activities.

# **WEEK 10:**

- Continue stretching and passive ROM (as needed)
- Dynamic stabilization exercises
- Initiate strengthening program
  - -External rotation (ER)/Internal rotation (IR) with therabands/sport cord/tubing -ER Sidelying
  - -Lateral Raises\*
  - -Full Can in Scapular Plane\* (avoid empty can abduction exercises at all times)
  - -Prone Rowing

- -Prone Horizontal Abduction
- -Prone Extension
- -Elbow Flexion
- -Elbow Extension

\*Patient must be able to elevate arm without shoulder or scapular hiking before initiating isotonics; if unable, continue glenohumeral joint exercises

### WEEK 12:

- Continue all exercise listed above
- Initiate light functional activities

#### **WEEK 14:**

- Continue all exercise listed above
- Progress to fundamental shoulder exercises

#### Phase IV – Advanced strengthening phase (week 16-22):

#### Goals:

- Maintain full non-painful active ROM
- Advance conditioning exercises for Enhanced functional use of UE
- Improve muscular strength, power, and endurance
- Gradual return to full functional activities

#### **WEEK 16:**

- Continue ROM and self-capsular stretching for ROM maintenance
- Continue progression of strengthening
- Advance proprioceptive, neuromuscular activities

#### **WEEK 20:**

- Continue all exercises listed above
- Continue to perform ROM stretching, if motion is not complete

# Phase V – Return to activity phase (week 20-26):

Goals:

- Gradual return to strenuous work activities
- Gradual return to recreational activities
- Gradual return to sport activities

# WEEK 23:

- Continue strengthening and stretching
- Continue stretching, if motion is tight

# WEEK 26:

• May initiate interval sport program (i.e. golf, etc.), if appropriate