Arthroscopic Rotator Cuff Repair Post-Operative Rehabilitation Protocol

The following protocol is a general guideline. Specific protocols will be based on tear size, location, chronicity and other patient specific factors and advanced based on shoulder pain level, swelling, range of motion and strength. The therapy protocol includes several distinct phases. The first phase involves controlling shoulder pain and swelling, while protecting the repair in the early postoperative period. The second phase involves restoring passive shoulder range of motion, while still protecting the repair. With the third phase, active shoulder range of motion is introduced. The final fourth phase introduces shoulder strengthening. Once these goals are achieved, sports specific and daily activity functional training may be performed. The supervised rehabilitation program is best supplemented by a home program that where the patient can perform given exercises at a home or gym facility. The ability to return to full activities requires sufficient time and participation in physical therapy.

**Phase I – Weeks 0 – 6: Postoperative Period / Repair Protection**

**Goals**

- Maintain/protect integrity of repair
- Diminish pain and inflammation
- Prevent muscular inhibition
- Become independent with modified ADLs

**Precautions**

- No shoulder ROM, lifting of objects, supporting of any weight, lifting of body weight by hands
- Abduction pillow for initial 4 – 6 weeks, depending on size of repair; wear at all times except for bathing
- Cryotherapy for pain and swelling
- Active elbow, wrist and hand ROM
- No active or passive shoulder motion
- For small and medium tears, may progress to next phase early

**Phase II – Weeks 4 – 8: Passive Range of Motion**

**Goals**

- Allow healing of soft tissue
- Do not overstress healing tissue
- Gradually restore full PROM
- Decrease pain and inflammation
Precautions

No lifting
No supporting body weight with hands and arms
No sudden jerking motions
No excessive behind the back movements
Avoid upper extremity bike and ergometer

- Discontinue abduction pillow; may use sling for comfort
- Pendulum exercises
- Begin PROM to tolerance (done supine; should be pain free)
  - Flexion to 90°
  - ER in scapular plane to ≥35°
  - IR to body/chest
- Continue elbow, wrist, and finger AROM/resisted
- Cryotherapy as needed for pain control and inflammation
- May resume general conditioning program (eg, walking, stationary bicycle)

Phase III – Weeks 8 – 14: Active Range of Motion

Goals

Full AROM
Maintain full PROM
Dynamic shoulder stability
Optimize neuromuscular control
Gradual return to functional activities

Precautions

No lifting sudden lifting or pushing activities, sudden jerking motions, overhead lifting
Avoid upper extremity bike and ergometer

- Progressive PROM until approximately full ROM. Gentle scapular/glenohumeral joint mobilization as indicated to regain full PROM
- Initiate AAROM flexion in supine position
- Advance to AROM exercises (flexion scapular plane, abduction, ER, IR)
- Begin rotator cuff isometrics
- Periscapular exercises
- Continue cryotherapy as needed
- May use heat before ROM exercises
- Aquatherapy okay for light AROM exercises
- Ice after exercise
Phase IV – Weeks 12 – 18: Early Strengthening

Goals

- Maintain PROM
- Gradual restoration of shoulder strength, power, and endurance
- Dynamic shoulder stability

Precautions

- No lifting objects >5 lbs, sudden lifting or pushing activities, sudden jerking motions, overhead lifting

- Continue stretching and PROM, as needed
- Dynamic stabilization exercises
- Initiate strengthening program
  - ER and IR with exercise bands/sport cord/tubing
  - ER side-lying (lateral decubitus)
  - Lateral raises*
    - Full can in scapular plane* (no empty can abduction exercises)
  - 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

Phase V – Weeks 16 – 24: Advanced Strengthening

Goals

- Maintain full non-painful AROM
- Advanced conditioning exercises for enhanced functional use
- Improve muscular strength, power, and endurance
- Gradual return to full functional activities

- Continue ROM and self-capsular stretching for ROM maintenance
- Continue progression of strengthening
- Advance proprioceptive, neuromuscular activities
- Light sports (golf chipping/putting, tennis ground strokes) if doing well

Week 24

- Initiate interval sport program (eg, golf, doubles tennis) if appropriate