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## **Arthroscopic Rotator Cuff Repair Protocol:**

This protocol is intended as a guideline to the post-operative pathway for a patient who has undergone an arthroscopic rotator cuff repair. It is not intended as a substitute for a Chartered Physiotherapist's clinical decision-making as to how their patient is progressing. Clinical exam findings, individual progress and/or the presence of post-operative complications will determine progress through the pathway. If there are any concerns as to how your patient is progressing please contact Dublin Shoulder Institute.

Patients are discharged from hospital wearing a shoulder immobiliser (DonJoy Ultrasling III) and with a home exercise program consisting of AROM for elbow/wrist/hand. Patients will then attend for a 2-week post-op review at Dublin Shoulder Institute before attending with their own Chartered Physiotherapist.

A video explaining how to correctly wear the shoulder immobiliser can be found here: https://www.dublinshoulder.com/services/shoulder-surgery/

Progression to the next phase is based on Clinical Criteria and/or Time Frames as appropriate.

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

#### Goals:

- Protect surgical repair
- Reduce pain and inflammation
- Prevent muscular inhibition
- Independent for ADLs with modifications, while maintaining integrity of repair.

### **Precautions:**

- Shoulder immobiliser to be worn at all times removing only for bathing and early stage rehab (after 2 week post-op review)
- NO active range of motion (AROM) of Shoulder
- NO lifting of objects
- NO excessive stretching or sudden movements
- NO supporting of body weight by hands
- Keep wounds clean and dry

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

- Shoulder immobiliser to be worn AT ALL TIMES except for bathing.
- Scapula muscles isometrics; cervical spine ROM
- Patient education: posture, joint protection, positioning, hygiene, etc.
- Ice for pain and inflammation (3-5 x daily for first 48hrs, then after exercises)

#### **DAY 7 TO 14:**

- · Continued use of sling
- Continue elbow/wrist/hand AROM
- Use of ice as needed for pain control

### **DAY 14 TO 28:**

- Pendulum Exercises
  - can begin 14 days after surgery, no pendulums before this time
- Patient will be advised to start passive ROM to tolerance at their 2 week post-op visit.
  - Movements will include: Flexion, Abduction in the scapular plane, ER and IR
  - Encourage use of pool if possible

(supervised hydrotherapy or self-directed PROM in swimming pool)

- Continue elbow, wrist, and finger AROM
- Use of ice as needed for pain control

Criteria for progression to the next phase (II):

- Passive ROM (PROM) Flexion to 100 degrees
- PROM ER in the scapular plane to at least 45 degrees
- PROM IR in the scapular plane to at least 45 degrees
- PROM abduction in the scapular plane to 90 degrees

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

#### Goals:

- Allow healing of soft tissue
- Do not over stress 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

#### **WEEK 5-6:**

- Sling to be worn until end of week 4, sometimes end of week 6 \*
- Between weeks 5 and 6 may use brace / sling for comfort only
- Discontinue brace / sling at end of week 6 at the latest
- \* Sling may need to be worn until end of week 6 depending on size of tear, revision repair, tendon quality and surgeon's own level of satisfaction with repair. **Specific post-op instructions will be provided.**
- Initiate active assisted range of motion (AAROM) flexion in supine position
- May use heat on joint prior to exercise
- Progressive passive ROM until approximately Full ROM at Week 4-5.
- 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 use of ice as needed
- May use heat prior to ROM exercises
- Continue to encourage pool work for ROM exercises, where appropriate
- Kinetic chain exercises (bridge, 1 leg bridge, 1 leg hip extension) can commence

## **WEEK 6-8:**

- Continue AAROM and stretching exercises
- Begin rotator cuff isometrics
- Initiate active ROM exercises
  - -Forward flexion
  - -Scaption/flexion in scapular plane

## Criteria for Progression onto the next phase (III):

Full AROM

## 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 (after week 12)
- Optimize neuromuscular control of shoulder
- Progress kinetic chain exercises
- 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

## **WEEK 10:**

- Continue stretching and passive ROM
- Dynamic stabilization exercises
- No strengthening before week 12, and then only on approval of treating surgeon

## **WEEK 12:**

• Initiate strengthening program

ONLY when full ROM regained and ONLY on approval of treating surgeon (the exact time of introduction of strengthening may vary for individual patients)

- -External rotation (ER)/Internal rotation (IR) with therabands/sport cord/tubing
- -ER Side lying
- -Lateral raises\*
- -Full can in scapular plane\* (avoid empty can abduction exercises at all times)
- -Prone rowing

- -Prone horizontal abduction (in scapular plane rather than pure 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.
- Initiate light functional activities

### **WEEK 14:**

- Continue all exercises listed above
- Progress to functional shoulder exercises "push " and "pull" movements (horizontal level and overhead)

## <u>Criteria for the progression to the next phase (IV):</u>

- Able to tolerate exposure to low-level functional activities
- Appropriate strength gains
- Evidence of dynamic shoulder stability
- Progression to higher demand work/sport activities where appropriate

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

#### Goals:

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

## **WEEK 16:**

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

#### **WEEK 20:**

- Continue all exercises listed above
- Continue ROM and self-capsular stretching for ROM maintenance

## 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

#### **WEEK 26:**

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