



Rotator Cuff Repair Protocol

Procedure Summary

Rotator cuff tears vary widely in terms of size, tear pattern, chronicity, health of the tendon, trophicity of the cuff muscle, retraction, healing potential, biomechanical sequelae, pain etc....!

Technique: usually done arthroscopically except for certain revision cases/particularly difficult tears, so soft tissue disruption is minimized. The rotator cuff tear is mobilized as necessary, freeing up any adhesions until the torn tendon end can be brought back to its bony insertion point. Suture anchors are used: these are small implants with sutures attached that are inserted into bone. The anchor gives a secure fixation into the greater or lesser tuberosity bone while the attached sutures are used to fix the tissue being repaired, in this case the rotator cuff tendon. The long head of biceps tendon is pathological in over 80% of cases with a cuff tear, so is usually tenotomised or tenodesed at the same time, and a subacromial decompression is often required also.

Even in healthy young patients the re-tear, or failure to heal, rate is at least 15%, and approaches 80% in over 75s. Despite this, functional results and pain improvement after surgery are reported to be good in approx. 85% of cases.

Notes:

- Rehab is geared towards maintaining as much ROM whilst protecting the repaired tendons from either excessive pull from active movement, or from excessive tension from stretch, until it has had an opportunity to heal.
- Continued pain is not unusual even 4 months post op. Frequent patient reassurance is often necessary.
- The main concern is to avoid stiffness: do not start strengthening too soon, this should come back in the long term if ROM is restored, and avoid pure abduction until very late as this just predisposes to ripping off the repaired tendon or recurrent impingement!

Aim: at 6/12 patient should have full active pain-free ROM

Expectations are different according to tear pattern and patient.

e.g: Young patient with traumatic tear = goal is full recovery.

Old patient with large tear = goal is pain relief, improved strength or range of motion are an added bonus if they occur!



Protocol

Treat all rotator cuff repairs the same unless an open procedure.

(for open procedures DO NOT use pulleys and protect deltoid function as deltoid is detached during the operation)

Note: Rehab no longer depends on the size of the tear.

Sling

6/52. **Mr Sharma likes his rotator cuff repairs to be in a small wedge abduction sling post operatively to improve pain relief. At 3/52 the wedge can be removed.**

Day 1- 6 weeks:

- Importance of pain control.
- Ice pack use + +
- Sling use.
- Sleeping position (e.g remove sling and use body strap for support).
- Washing and dressing.
- AROM of unaffected joints eg fingers, wrist and elbow.
- Postural advice and scapular setting.
- Encourage waist level ADL's (e.g. brushing teeth, eating).

Exercises taught on the ward

Pendulum-ensure true GHJ ROM

Passive shoulder flexion to 90° / Pulley to 90° (unless open procedure) for 6/52.

Passive shoulder ER to neutral for 6/52.

Hand, wrist and elbow AROM

Do not force into any direction within reasonable pain levels.

Follow-up Physiotherapy

2/52 post op.

Phase 1 Aim: to increase joint ROM passive to active

Range of movement progressing gradually through the following:

1a Passive ROM (controlled by the patient).

1b Active assisted ROM.



NOTE - encourage SCAPTION rather than pure abduction.
- progress using short to long lever principles.

No IR HBB for 8 weeks post op.

Aim: at 6/52 patient should have 50% active assisted ROM (e.g. able to move arm up to horizontal (shoulder level)).

6 weeks onwards:

Start **1c** Active ROM.

Continue to Phase 2 .

Phase 2 Aim: Stretching at end of range and strengthening

2a Stretches at end of range

- encourage stretches to be done by the patient using a broom handle etc rather than by physiotherapist
- attention to posterior capsule stretch (within relevant restrictions).

2b Strengthening against resistance only once patient is achieving functional AROM and no pain to resisted muscle testing.

- include strengthening of rotator cuff, UFT, LFT, serratus anterior, biceps, triceps, deltoid as per assessment.

10-12 weeks onwards:

Progress to Phase 3 when patient has full AROM.

Phase 3 Aim: full active rehab/ higher level function

Start sport specific rehab.

Patients can return back to competitive sports when achieving full AROM and normal strength.

Aim: at 3/12 patient should have 80 % active ROM.

General guidelines

Consultant post op follow up

All patients are normally followed up in clinic with consultant at 6-8/52 post op (Stitches to be removed at 2/52 post op at GP practice).



Driving

Usually possible post op at 6/52.

This is dependant on patient function and safety and specific post op instructions. Patients should always check with the DVLA and insurance company.