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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.

- Some continued pain and stiffness is not unusual even 3 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 good 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

Sling
6/52.

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

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 then pure abduction.
- progress using short to long lever principles.

No IR HBB until at least phase 2 dependant on procedure.

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 (once have functional ROM passively).

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 2-6/52 post op

Some patients who develop post-operative stiffness that does not resolve with physiotherapy by 4-6 months can be considered for an arthroscopic release.

Driving

Usually possible post op at 6/52.