12 Weeks Onwards

Range of Motion Exercises

- Full range of assisted active motion is allowed apart from horizontal Flexion and HBB. These motions may be able to be initiated in lower ranges of elevation without any sustained holding by 10 weeks. On others, may not be able to commence till 12 weeks or longer due to the presence of biceps pain. Always watch for any aggravation of biceps pain and cease if biceps pain increases.
- Strengthening further into range as pain and range of motion allows. Never load the tendon into end of range if shoulder stiffness is present.
- Keep in mind tendon biology and patient requirement. Obviously different functional requirements for younger patients than older patients.

Strengthening Exercises

- Prone horizontal extension drills are commenced into higher ranges of abduction till 90° reached, elbow bent, short lever.
- Internal and external rotation strength may gradually progress into above 90°, usually in standing against Theraband. Only commence if the rotator cuff is strong, good tissue quality and there is adequate range of motion. Do not progress into end of range of abd/ER if there is any compression pain in the cuff. May only do partial arc.

14 Weeks Onwards

Weight bearing drills commenced as required:

- eg. Push ups. Commence on the wall and then progress to knees. Care as weight bearing in the first 12 weeks may aggravate compression of the rotator cuff. Hence activities such as yoga are not recommended for the first 12 weeks unless they are performed in a modified fashion so as to not either stress the end of range of motion or involve weight bearing of the glenohumeral joint.
- Progress all exercises into functional positions for sport and occupation.
- Strength work is performed usually once per day and still focus on endurance, if required. From 6 months onwards return to gym programmes may commence with some low load hypertrophy drills incorporated. In general for most exercises outlined rarely would any weight be heavier than 4kg for most men and 3kg for most women. No heavy weights are to be performed, particularly overhead and in general it is preferred that incline bench, dips and chin ups are not performed.
- Patients are encouraged to continue on their stretches and strength work till 6-12 months post surgery or when full realistic functional capacity is achieved unless advised otherwise by the surgeon or the physiotherapist.

Mr. Shane Barwood 9525 1035
www.shanebarwood.com.au
Mr. Ashley Carr 9573 9684
www.ashleycarr.com.au
Mr. Matthew Evans 9529 3820
www.matthewevans.com.au
Mr. Greg Hoy 9525 1833
www.greghoy.com.au

Melbourne Orthopaedic Group
A.C.N. 005 057 269
33 The Avenue, Windsor 3181.
P.O. Box 447, Prahran 3181.

Physiotherapists
Lyn Watson Simon Balster
Tel: 9510 8999 or 9529 8899

REHABILITATION PROTOCOL FOR ROTATOR CUFF SURGERY SMALL TO MEDIUM TEARS

Physiotherapy Guidelines

This is a guideline for your physiotherapist to help you progress your shoulder rehabilitation over the next 12 weeks so that you can achieve a functional shoulder. A *physiotherapist* who is experienced in shoulder rehabilitation should be consulted throughout the programme to teach and individually modify your programme.

Immobilization/Movement Restrictions

Wear sling/immobilizer	During the day: _____ weeks. At night: _____ weeks.
Additional restriction of range of motion required	YES: Motion: _____ Restriction: _____ NO
Protection of Biceps Tendon required	YES: Duration: _____ NO

Post Operative Programme

1-14 Days

Manual Physiotherapy

Heat may be utilized prior to exercise.

Ice may be applied post exercise.

Gentle massage around the shoulder girdle, trigger points; supraspinatus, infraspinatus and biceps belly.

Range of Motion Exercises

Pendular exercises:

- Flexion, extension, circular, horizontal flexion/extension – respecting pain.
- Arms supported or hanging, whatever is most comfortable.

Precautions/Dosages

No isometric glenohumeral exercises.

Exercises performed 3 times per day or as pain determines.

Usually stretches are held for a count of 5 and repeated 10 times dependent on pain.

2-4 Weeks

Range of Motion Exercises

Active assisted exercises are performed with the assistance of the other arm or with the assistance of a stick.

Active assisted ROM exercises progressed:

- ER/IR still performed in supine with arm supported. Performed in 20° - 30° abducted. Arc of motion increased as pain allows to ¾ range as pain allows and tolerated.
- Flexion to 90° - 120° (max) as tolerated, do not force.

4-6 Weeks

Range of Motion Exercises

- ER/IR progressed up to 45° abduction arm supported on towel, progress arc of motion to full as tolerated.
- Supine flexion commenced with a stick if tolerated but may still need to be performed cradling arm.
- Range of flexion over head progressed as tolerated to 120° (often elbow is required to be bent slightly).

Strengthening Exercises

Sub-maximal pain free isometric exercises:

- Extension with elbow bent (care arm doesn't go back past body).
- ER/IR may need to perform in plane of the scapula (only performed on non-repaired rotator cuff).
- Only perform sub-maximal glenohumeral isometric exercises if no night pain present. If night pain present then leave till 6 weeks post-operation or when night pain settles.
- Perform all exercises with elbow bent, sub-maximal resistance <30% MVC.

Dosage

- Perform 2 times a day.
- Most exercises are held for a count of 5 and repeated to a maximum of 20 repetitions.
- Stretches may be held for longer durations as required up to a count of 15 seconds, usually two repetitions.
- Whilst the assisted active EROM exercises are progressed here, expect that the range may come out gradually over the next 12 weeks and never should be forced.

6-10 Weeks

Range of Motion Exercises

- Continue with all exercises outlined in 4-6 weeks.
- May utilize more advanced stretches such as longer duration holds, sidelying stretching over head with a stick, sliding arm out along the bed or preacher stretches (patient kneeling on ground, arms supported on chair or table while patient leans back onto their haunches) as tolerated.
- ER/IR may gradually progress into higher ranges of abduction.
- Supine assisted active abduction may gradually be commenced but care not to force the motion or create any impingement pain by pushing the motion too far.

Strengthening Exercises

- Supine flexion – arm supported on towel to prevent arm dropping into extension – lift up only 30° (may initially require assistance).
- Sidelying external rotation – arm supported on towel, 0° abduction. May initially require support of forearm on pillow or books, limit arc of motion initially.
- Shoulder shrugs – add weight as tolerated.
- Supine internal rotation (arm supported by a rolled up towel to prevent arm dropping into extension) 0° abduction – Theraband or standing – internal rotation at 0° abduction – Theraband pull from position or external rotation into internal rotation of 0° - 10°.
- Bent over rows in neutral to 30° abduction (do not go past the level of the body).
- Biceps/triceps.
- All resisted exercises are performed below shoulder height for the first 8-10 weeks post operation.
- Usually only partial arc of motion may be initially performed to avoid compression of the rotator cuff.
- Resistance is applied either through Theraband or light weights. Commence with light resistance (yellow or red) or ½kg and then increase as tolerated. Resistance drills should only be performed initially once a day until it is clear that no aggravation of the tendon or joint is going to occur. May progress to performing twice a day.
- For most exercises endurance repetitions are recommended, and rarely are any drills progressed past 1½kg - 2 kg maximum in the first 12 weeks and most people are ½kg - 1kg.