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REHABILITATION PROTOCOL FOR ANTERIOR SHOULDER STABILISATION

Physiotherapy Protocol

The following is intended to guide your Physiotherapist through the basic postoperative rehabilitation process. Each patient may still require individualised modifications of their program by their Physiotherapist depending on the extent of their original injury, type of surgery performed, pain level, degree of stiffness and strength.

Shoulder Sling Immobilization:

6 Weeks: On during the day and night - only off for Rehab & Showering

Important Movement Restrictions:

External Rotation ROM should not be stretched into any pain and only at 0° abduction for the first 6 weeks Movement not beyond:

- 0° ER for the first 2 weeks, then
- 45° ER until 4 weeks post-op, and then
- ER after 4 weeks increase as comfortable

This protocol is written for the patients Physiotherapist both as a courtesy and in confidence to assist in the assessment and management of a referred patient. This protocol must not be copied to any third party, including the patient or anyone nominated by the patient, without the express permission of The Author. Unauthorised publication of this letter would be a breach of The Author's copyright. ©201

Dosages

Range of motion exercises performed 2-3 times a day. Strength control work/endurance performed 1-2 times per day. Hypertrophy work performed, maximum 1 per day, 3days/wk.

0-2 Weeks

Come out of Sling for exercises only.

Wrist, Forearm and hand:

• Full active range of motion

Elbow:

• Assisted flexion & extension of elbow in neutral rotation

Pendular exercises

- Bent over, arm supported range within pain limits
 - Flexion/Extension to a maximum of 90°
 - Circular Motion
 - Horizontal Flexion & Extension

2-4 Weeks

Come out of Sling for exercises only.

Pendular exercises

• Continue as above but gradually increase movement within pain limits

Assisted active in supine

- Flexion; arm supported with elbow bent up to 90-100° or as pain allows
 - Progress to flexion with a stick as tolerated
- External rotation (ER) at 0° abduction with elbow supported on towel:
 - Assist arm out into ER with other hand or stick to 0°
 - Progress to 20° -30° by 4 weeks

Isometric scapula exercises

- Upward rotation, elevation, depression & retraction
 - which scapula setting drills are required is individually determined by each patients scapula resting position & underlying GHJ mobility – for example hypermobile joints will require setting into Upward rotation

4-6 Weeks

Pendular exercises

• Continue as above as a gentle warm up; x 5-10 of each

Assisted active in supine

- Flexion with arm supported or using a stick no limit apart from pain
- External Rotation at 0° abduction progressing further into range as comfortably tolerated up to ¾ of range
- Internal Rotation at 30° abduction with elbow supported on towel:
 - Assist arm down, into IR with other hand to 20-30°

Isometric scapula exercises

• Set the scapula into correct position as determined by assessment. Upward rotation, Posterior tilt, Elevation, Depression or Retraction

Isometric glenohumeral joint exercises.

• Isometric ER, IR, Ext, Flex, Abd, Add in standing painfree pushing against the wall or against the other hand

Commence assisted extension in standing and HBB but short of any pain

Active sidelying ER (if able/comfortable)

• Initially no weight, progress to ½kg.

Resisted extension rubbers in standing (Elb only to the line of the body)

• Short lever progressing resistance or to long lever as comfortable

6-10 Weeks

Increase all assisted active range of motion drills:

- Flexion with a stick in supine as tolerated

 Progress to flexion in standing with a stick or with assistance of the other limb
- External & Internal rotation in supine as above progressing to greater abduction angles up to 90° Abduction
 - Progress to assisted active ER with a stick in standing, moving into greater ranges of abduction as tolerated

New assisted active range of motion drills:

- Horizontal Flexion in standing/sitting pulling arm across chest
- Extension in standing with a stick progressing to assisted hand-behindback as comfortable

Continue Isometric scapula exercises and progress to:

- Scapula setting with Theraband resistance or free weights (1/2 kg increments)
- Scapula setting with push-ups off the wall from 8wks

Continue Isometric glenohumeral joint exercises and progress to Theraband or free weight resistance as comfortable:

- Extension Theraband with elbow bent to 90° and not past bodyline. Progress:
 - Theraband resistance
 - to longer lever
 - to Bent-over-row with free weight
- External Rotation:
 - incorporating scapula setting
 - with Theraband in standing
- Internal Rotation:
 - incorporating scapula setting
 - with Theraband in supine or standing
- Flexion:
 - Incorporating scapula setting
 - Supine Flexion with free weight at 0° Abd with towel under Elb
 - With Theraband in standing in the scapula then sagittal plane
- Horizontal Extension
 - Incorporating scapula setting
 - With Theraband in standing at 45°Abd, progressing to 90°Abd
 - Bent-over-row with free weight at 45°Abd then 90°Abd
- Abduction
 - Short level Abd to 45° with scapula setting
- Dynamic humeral head control work with Theraband as required

10-12 Weeks

Continue stretching to achieve full functional range of motion (unless limits set by surgeon).

Continue Isometric scapula exercises and progress:

- Theraband, weight or weight bearing resistance
- Incorporating the scapula setting into dynamic strengthening exercises

Continue strengthening with Theraband or free weights as comfortable progressing to:

- Exercises in higher ranges of Abduction ($45^{\circ} \rightarrow 90^{\circ}$)
 - Extension @45°Abd then 90°Abd either with Theraband or wts
 - External & Internal Rotation @45°Abd (if needed) and 90°Abd
 - Flexion with Theraband or a free weight into elevation above shoulder height with scapula setting
 - Abduction with a bent elbow, scapula setting and an appropriate weight

12 Weeks+

Continue stretching as for 10-12 weeks

Continue Isometric scapula exercises as for 10-12 weeks

Continue strengthening as for 10-12 wks but also progressing Theraband and free weights to:

- Exercises in higher ranges of Abduction (90°→120°→120°+, if required)
- Variations in concentric, eccentric, diagonal planes of motion and speed using Theraband and free weights
- Other more general gym strengthening drills may commence as well as push up and weight bearing work

Avoid: weights into Horizontal Extension as it puts too much stretch on anterior shoulder joint

Begin Functional Drills Required by the Patient

• According to the patients sporting and occupational requirements the therapist should create exercises that mimic/reproduce the positions and

the movements required and perform the activity. The patient should be instructed to perform these movements:

- Unweighted initially to test the safety of the drill, then
- Against graduated Theraband or free weight resistance
- Progressing in repetitions, resistance & speed as required to return the patient to those functional activities
- <u>NOTE</u>: Care should be taken to incorporate both scapula and humeral head control into these drills

Rehabilitation Strength Targets

Below are minimum physiotherapy targets to achieve before patients move independently to gym or specific sporting skills as determined by each individual strength measurements.

Weights commence with 1/2kg and progress in 1/2kg increments

Theraband – usually commence red and progress to green or blue

Anterior deltoid – 3 -4 kg 2 sets of 20 reps

Posterior deltoid – 3-4 kg 2 sets of 20 reps

Middle deltoid – 3-4kg 2 sets of 20 reps

Shrugs – max 4 - 5 kg 2 sets of 20 reps

Sidelying ER – 2 -3kg max 2 sets of 20 reps

ER / IR – at 90° with Green theraband 2 sets of 20 reps