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Modified from the protocol developed at Boston Shoulder Institute by the Massachusetts General Hospital and Brigham & Women's Hospital Shoulder Services.

Arthroscopic Subacromial Decompression Protocol:

This protocol is intended as a guideline to the post-operative rehabilitation pathway for a patient who has undergone an arthroscopic subacromial decompression. It is not intended as a substitute for a Chartered Physiotherapist's clinical decision-making regarding how the 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 us at the Dublin Shoulder Institute.

After isolated subacromial decompression, patients are discharged from hospital with a sling to be worn for comfort only. Unless otherwise specified, the patient should wean out of the sling in the days following surgery and be completely out of it by one week post-operatively at the latest.

Other surgical procedures may be performed alongside subacromial decompression please refer to the postoperative physiotherapy prescription.

Phase 1: Protective healing and restore movment (1-2 weeks)

Goals:

- Reduce pain/inflammation
- Minimize stress to healing structures
- Restore non-painful range of motion (ROM)
- Minimise shoulder muscle atrophy and muscle inhibition
- Improve postural awareness
- Independent with activities of daily living (ADLs)
- Wean from sling ASAP.

Range of Motion:

• Passive range of motion (non-forceful flexion and abduction)

- Active assisted range of motion (AAROM)
- Active ROM
- Pendulums
- Pulleys
- Cane exercises
- Prescribed stretches
- Proprioceptive Neuromuscular Facilitation (PNF)
- Thoracic Spine mobility Rotation stretches.

Strengthening:

- Isometrics: scapular musculature, deltoid, and rotator cuff as appropriate
- Kinetic Chain exercises (Bridge, 1 leg bridge, Hip Hinge in standing)

NOTE: Do not commence any upper limb functional strength movements (push/pull) until FULL AROM (flexion, abduction, external rotation) has been achieved and is maintained.

Modalities:

- Manual therapy- Thoracic spine PIVM's to improve thoracic spine mobility, GH joint traction for pain modification (Gd I/II from 7 days post-op if comfortable for patient)
- Light massage/ release of deltoid and latissimus dorsi
- Ice
- Heat/ice contrast: to reduce pain and swelling a heat/ ice contrast can be used from 7 days post-op.

Criteria for progression to Phase 2:

- 1. Full active and passive ROM
- **2.** Minimal pain and tenderness

Precautions:

- Avoid pure shoulder abduction (both active and passive) to avoid unnecessary compression of subacromial structures, work in scaption instead.
- Avoid creating or reinforcing poor movement patterns, such as excessive scapulothoracic motion with upper extremity elevation

Phase 2: Intermediate Phase (2-6 Weeks)

Goals:

- Regain and improve muscular strength (ONLY after full ROM has been achieved)
- Normalise arthrokinematics
- Improve neuromuscular control of shoulder complex

Exercises:

- Strengthen shoulder musculature- add resistance with dumbells, resistance bands and body weight.
- Include 'Push/Pull' exercises. Consider strengthening in all planes of motion.
- Strengthen scapulothoracic musculature- by including Row or Pull type exercises
- Initiate upper extremity endurance exercises
- Continue and progress Kinetic chain exercises.
- Incorporate upper limb strengthening with lower limb exercises.

Manual Treatment:

- GH joint mobilisation to improve/restore arthrokinematics
- GH joint mobilisation for pain modulation

Modalities:

• Ice as needed.

Criteria for Progression to Phase 3:

- 1. Full painless ROM
- 2. No pain or tenderness on examination

<u>Phase 3: Dynamic (Advanced) Strengthening Phase (from 6 weeks)</u> Goals:

- Improve strength, power and endurance
- Improve neuromuscular control
- Prepare patient to begin throwing and other overhead activities relevant to occupation or sport.

Emphasis of Phase 3:

- High Spees, high energy strengthening exercises
- Eccentric exercises
- Diagonal patterns (use resistance band or dumbells)

Exercises:

- Include push/pull exercises in supine, standing (chest press/ overhead press, bent over row, horizontal row, lat pull down, band press)
- Progress resistant band exercises to 90/90 position (shoulder abduction / ER) for internal rotation and external rotation (slow/fast sets). Incorporate kinetic chain where appropriate (lunge stance, 1 leg stance)
- Plyometrics for rotator cuff
- Diagonal chop exercises
- Isokinetics high plank holds (with arm or leg lift)
- Continue endurance exercises
- Include 'Push/Pull' exercises. Give consideration to strengthening in all planes of motion.
- Strengthen scapulothoracic musculature, by including row or pull type exercises
- Initiate upper extremity endurance exercises
- Continue and progress kinetic chain exercises.
- Incorporate upper limb strengthening with lower limb exercises.

Manual Treatment:

- GH joint mobilization to improve/restore arthrokinematics
- GH joint mobilization for pain modulation

Modalities:

• Ice as needed.

Criteria for Progression to Phase 3:

- Full painless ROM
- No pain or tenderness on examination

Phase 3: Dynamic (Advanced) Strengthening Phase: (6 weeks and beyond)

Goals:

- Improve strength, power, and endurance
- Improve neuromuscular control
- Prepare patient to begin to throw, and perform similar overhead activities relevant to occupation or sport

Emphasis of Phase 3:

- High speed, high energy strengthening exercises
- Eccentric exercises
- Diagonal patterns (use resistance band or dumbell)

Exercises:

- Include Push /Pull exercises in supine, standing (chest press, overhead press, bent over row, horizontal row, lat pull down, band press)
- Progress resistant band exercises to 90/90 position for internal rotation and external rotation (slow/fast sets) incorporate kinetic chain where appropriate (lunge stance, 1 leg stance)
- Plyometrics for rotator cuff
- Diagonal chop exercises
- Isokinetics high plank holds (+ arm or leg lift)
- Continue endurance exercises