

# POSTERIOR STABILISATION REHABILITATION GUIDELINES

Protocol

POSTERIOR STABILISATION

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## INTRODUCTION

The guidelines that follow are a frame work of basic exercises and management strategies based on the patient who has had a posterior stabilisation.

The physiotherapy programme will need to be **individualised** for each patient, all exercises should be performed without pain and the details of specific restrictions will be in the post-operative instructions. If you have not received these please ring the consultant's secretary.

Emphasise to the patient the importance of protecting the repair to allow soft-tissue healing in the first two phases. The milestones may be used to assess whether you feel the patient is making good progress or not.

Shoulder rehabilitation is more than strength-training of the shoulder muscles alone. The (neuromuscular) rehabilitation addresses the whole shoulder girdle, upper extremity, core stability and training of the kinetic chain.

## **POST SURGERY**

### Phase I (I – I4 days)

### Goals:

- Maintain integrity of the repair 

   External rotation brace at all times except while dressing/washing or doing exercises 
   Teach sling, dressing and personal hygiene techniques
- Management of pain, inflammation and muscle inhibition  $\circ$  Analgesics, NSAID's, ice, sling, passive movement and posture
- Teach shoulder girdle control/setting and relaxation  $\circ$  Retraction and depression
- Gradually increase PROM as tolerated/not into pain/do not force or stretch 

   Pendulum in neutral rotation 
   ER (from neutral outwards)
- Hand, wrist, elbow and neck range of movement (ROM) exercises as required
- Advice on sleeping position  $\circ$  Wearing sling, if supine use a pillow beneath the elbow to prevent the shoulder resting in extension
- Prevent muscle atrophy 
   Sub-maximal, pain-free isometrics in neutral (<30% Maximal Voluntary Contraction) as tolerated

## Precautions:

- Sling usually for 3-6 weeks (check post-operative note)
- Avoid combined forward flexion (FF) and internal rotation (IR) usually for 6 weeks (check postoperative note) 
   No lifting of objects
- No excessive stretching or sudden movements
- No supporting of body weight by hands
- Keep wounds clean and dry

• No driving for: right 3 weeks, left 6 weeks

#### Milestones at 2 weeks:

- Pain, inflammation and muscle inhibition well managed
- □ Return to pre-operative sleep patterns
- □ Good scapula setting
- □ PROM: elevation in neutral to 90°, IR to neutral

## Phase 2 (15 Days - 6 weeks)

## Goals:

- Allow healing of soft tissue do not over-load healing tissue
- Continue to manage and reduce pain, inflammation and muscle inhibition 

   As phase I 
   Alternate treatment strategies as appropriate e.g. manual therapy techniques, taping
- Once stitches have been removed begin scar massage
  - Gradually restore full, pre-op PROM (except FF and IR) as tolerated/not into pain/do not force or stretch
  - Refer to post-op note for further specific restrictions
- Introduce active-assisted range of movement (AAROM) gradually progressing to active range of movement (AROM) as tolerated/not into pain 

   Refer to post-op note for further specific restrictions
- Re-establish dynamic shoulder stability guide progression of AAROM and AROM

Ensure good SHR through  $\ensuremath{\mathsf{PROM}}$  and use it to

# Precautions:

- Avoid combined forward flexion (FF) and internal rotation (IR) usually for 6 weeks (check postoperative note)
- No lifting of objects
- No excessive shoulder extension
- No excessive stretching or sudden movements
- No supporting of body weight by on operated upper limb
- Usually wean out of the sling after 4-6 weeks (check post-operative note)

### Milestones at 6 weeks:

- Pain, inflammation and muscle inhibition well managed
- Pre-operative PROM except IR and horizontal flexion
- □ Passive IR 25% of pre-operative range
- □ Good SHR with PROM

# Phase 3 (7 - 14 weeks)

# Goals:

- Full PROM
  - Introduce multi-directional stretching into end of range as tolerated/not into pain
- Gradually restore pre-operative AAROM and then AROM with good SHR as tolerated/not into pain
- Gradually introduce and progress shoulder strengthening as tolerated/not into pain o Introduce scapular stabilisation exercises
  - Introduce cuff strengthening, progressing to maximal isometrics then to isotonic strengthening
     Introduce proprioceptive exercises
  - Gradually progress to shoulder and upper limb strengthening as long as the patient is able to elevate the arm without the shoulder or scapular 'hitching'
  - o Gradually progress to dynamic and rhythmic stabilisation exercises
- Gradually progress lower limb and core strengthening as required
- Gradually return to light, non-repetitive functional activities
- Gradually introduce light, early-stage sport-specific exercises [] Return to driving, right 6 weeks, left 8 weeks

# Precautions:

- Avoid excessive loading of shoulder  $\circ$  No heavy lifting
  - No prolonged, repetitive upper limb activities

## Milestones at 14 Weeks:

- □ Resolved pain, inflammation and muscle inhibition
- □ AROM with good SHR through elevation to 100% of pre-operative range

□ Passive IR to 75% of pre-operative range

# Phase 4 (3 – 6 Months)

# Goals:

- Maintain full PROM 
   Continue multi-directional stretching into end of range as tolerated/not into pain 
   Capsular stretches
- Full pre-operative AROM with good SHR as tolerated/not into pain
- Progress shoulder strengthening as tolerated/not into pain 

   Progress cuff strengthening and scapular stabilisation exercises
  - Progress proprioceptive exercises 

     Progress shoulder and upper limb strengthening ensuring good SHR 
     Progress dynamic and rhythmic stabilisation exercises
- Progress lower limb and core strengthening as required
- Gradually progress functional activities
- Gradually progress sport-specific exercises

## **Precautions:**

- Continue to avoid excessive loading of shoulder  $_{\odot}$  overhead activities

No heavy, repetitive or prolonged

## Milestones at 6 months:

□ Full pain-free motion and rotator cuff strength restored

## Phase 5 (6 – 12 Months)

## Goals:

- As phase 4
- Gradual return to strenuous work activities as required
- Gradual return to contact sports as required

To contact the Consultant Secretary, call 07810356433 or to contact the Physiotherapy team for Sulis Hospital call 01761 422388, for Physiotherapy Circle Health Group Bath Clinic call 01225 838767, for Physiotherapy St Joseph 01633 820321