

## Introduction

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 allowing soft-tissue healing in the first two phases. Alongside this we aim to regain passive range of movement (PROM) and good scapula-humeral rhythm (SHR) before moving onto strengthening in stage 3. 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.

## Notes

**Unreparable rotator cuff tear:** if the rotator cuff tissue is insufficient to allow a repair, please provide and guide the patient through an Anterior Deltoid Programme, see <https://www.shoulderdoc.co.uk/article/1028>

**InSpace™ implantation (Ballon):** please see accompanying OrthoSpace InSpace™ implantation protocol and <http://orthospace.co.il/professional/demo-videos/>

## Phase 1 (1-14 days)

### Goals:

- Management of pain, inflammation and muscle inhibition
  - Analgesics, NSAID's, ice, sling, passive movement and posture
- Teach shoulder girdle control/setting and relaxation
  - Retraction and depression
- Gradually increase PROM **as tolerated/not into pain/do not force or stretch**
  - Pendulum with good SHR
  - ER/IR
- Gradually progress to active-assisted range of movement (AAROM) and active range of movement (AROM) **as tolerated/not into pain/do not force or stretch**
- Hand, wrist, elbow and neck range of movement (ROM) exercises as required
- Advice on sleeping position
- Prevent muscle atrophy
  - Sub-maximal, pain-free isometrics in neutral (<30% maximal voluntary contraction) as tolerated

### Precautions:

- Sling usually for 3-7 days for comfort as required
- Keep wounds clean and dry

### Milestones:

- Pain, inflammation and muscle inhibition well managed
- Return to pre-operative sleep patterns
- Good scapula setting

## Phase 2 (day 15-6 weeks)

### Goals:

- Continue to manage and reduce pain, inflammation and muscle inhibition
  - As phase 1
  - 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 **as tolerated/not into pain/do not force or stretch**
- Gradually restore full, pre-op active range of movement (AROM) **as tolerated/not into pain/do not force or stretch**
- Re-establish dynamic shoulder stability

- Ensure good SHR through PROM and use it to guide progression of AAROM and AROM
- Progress to maximal, pain-free isometrics
- Gradually introduce proprioceptive exercise, lower limb and core strengthening as required and light, early-stage sport-specific exercises
- Gradually return to light, non-repetitive functional activities

**Milestones:**

- Minimal pain, inflammation and muscle inhibition
- Good SHR with AROM

**Phase 3 (7-14 weeks)****Goals:**

- Full PROM
  - Introduce multi-directional stretching into end of range **as tolerated/not into pain**
  - Capsular stretches (especially posterior capsule if tight) **as tolerated/not into pain**
- Continue to 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**
  - Introduce scapular stabilisation exercises
  - Progress cuff strengthening, progressing from maximal isometrics to isotonic strengthening **as tolerated/not into pain**
  - Progress 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'**
  - Gradually progress to dynamic and rhythmic stabilisation exercises
- Progress lower limb and core strengthening as required

**Precautions:**

- Avoid excessive loading of shoulder
  - No heavy, repetitive or prolonged overhead activities

**Milestones at 14 weeks:**

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

**Phase 4 (3-9 months)****Goals:**

- Maintain full PROM
  - Continue multi-directional stretching into end of range **as tolerated/not into pain**
- 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 shoulder and upper limb strengthening ensuring good SHR
  - Progress dynamic and rhythmic stabilisation exercises
- Gradually progress functional activities
- Gradually progress sport-specific exercises

**Milestones at 4 months:**

- Full pain-free motion with good SHR

**CircleBath Specialist Orthopaedic Shoulder Team**

To contact the Consultants Secretaries, call Circle Bath Hospital on 01761 422222 or to contact the Physiotherapy team call 01761 422388.