

Reading Shoulder Surgery Unit



Physiotherapist Information

*Set of protocols*

Royal Berkshire Hospital  
Berkshire Independent Hospital  
[www.readingshoulderunit.com](http://www.readingshoulderunit.com)

## **Arthroscopic Subacromial Decompression**

This operative procedure aims to increase the size of the subacromial space. Evidence of inflammation or scuffing on the under surface of the acromion, coraco-acromial ligament and on the bursal side of the rotator cuff ("kissing lesion") indicates the presence of an impingement. The condition of the acromial surface (A) and the bursal surface (B) are scored on a scale of 1-3. The operation involves the removal of the anterior 1/3 of the acromion and partial resection of the coraco-acromial ligament. The acromio-clavicular joint (ACJ), remains intact unless excision is indicated. The superior AC ligament remains intact so that the joint remains stable.

It must be remembered however that over zealous physiotherapy and repetitive or sustained overhead activities could lead to delayed recovery.

### **Aims of Physiotherapy**

Achieve full range of movement

Improve postural awareness and initiate scapula stability.

Strengthen the rotator cuff

Restore proprioception using open and closed chain activities.

If the rotator cuff is deficient, strengthen anterior deltoid in supine.

### **Return to Functional Activities**

Driving 1 week

Return to Work Dependant on the patient's occupation

Golf 6 weeks, (but not driving range)

Racquet Sports Sport specific training when comfortable Competitive play after 3 months

Lifting As able

It is important to avoid repetitive or sustained overhead activity at or above the shoulder height for 3 months

# **Rotator Cuff Repair**

Most repairs are now performed arthroscopically so there is less tissue trauma and reduced risk of adhesions. Post-op stiff shoulder is now rarely a problem, so the priority is to protect the repair from breaking down.

Always be guided by the patient's pain. Do not force, stretch or stress the repair before 6 weeks

Protocol selection will be determined not just by the size of tear, but also the shape of the tear, strength of repair and general tissue & joint condition. Always check with the Consultant.

Educate patients about basic rotator cuff function and lever principles to reduce the risk of stressing the repair prematurely.

Patients are in a sling for 6 weeks and should not drive for 6 to 8 weeks.

## **(1) MINOR (small): Less than 1 cm**

### **Day 1 – 2 Weeks**

Mastersling with body belt

Wrist exercises

Elbow exercises

Shoulder girdle

Initiate scapula setting

Begin pendular exercises

### **3 Weeks – Review by Consultant**

Commence Physiotherapy. DO NOT FORCE OR STRETCH

Wean off sling (may be delayed till 6 weeks)

Continue pendular exercises

Progress passive flexion in scapular plane and external rotation to neutral

Progress to assisted flexion, extension, abduction as is comfortable – internal and external rotation to neutral only.

Initiate gentle cuff isometric exercises as pain allows

Encourage normal function around waist level

May begin active exercises if appropriate - ONLY IF GUIDED BY THE CONSULTANT

Can start driving (guided by Consultant)

## **6 Weeks**

Continue active exercises progressing into range

Commence anterior deltoid exercises as range allows

Commence rotator cuff strengthening and closed chain exercises

Start stretching limited movements

Encourage functional movement within pain limits

Begin gentle hydrotherapy if available

Proprioceptive exercises and core stability work as appropriate

## **(2) MEDIUM: 1cm – 3cms**

### **Day 1 to 3 Weeks**

Mastersling with body belt plus abduction pad

Wrist, hand and finger exercises

Elbow exercises

Shoulder girdle

Initiate scapular setting

### **3 Weeks – Review by Consultant**

Abduction pad removed, unless otherwise stated by Consultant

Sling retained

Begin pendular exercises

### **4 to 5 Weeks**

Start physiotherapy. DO NOT FORCE OR STRETCH

Passive flexion in scapular plane + external rotation

Initiate gentle cuff isometrics as pain allows

Progress when comfortable to assisted exercises

Begin hydrotherapy if available

## **6 Weeks**

Wean out of sling

Begin active exercises. Encourage functional movements at waist level

Anterior deltoid strengthening exercises as range of movement allows

Progress range adding resistance as appropriate

Start rotator cuff strengthening progressively, dependent on pain

Add closed chain exercises

Begin proprioceptive skills

### **8 Weeks**

Start driving

**(3) MAJOR (large): 3cms – 5cms**

**MASSIVE: greater than 5 cms**

### **Day 1 to 3 Weeks**

Mastersling with body belt plus abduction pad

Wrist and finger exercises

Elbow exercises

Shoulder girdle

Initiate scapula setting

### **3 Weeks – Review by Consultant**

Abduction pad retained, unless otherwise stated by Consultant

Sling retained

Begin pendular exercises as instructed

### **6 Weeks**

Remove abduction pad if not already done so

Commence physiotherapy. DO NOT FORCE OR STRETCH

Wean out of sling slowly

Passive flexion etc

Gentle rotator cuff isometrics, pain limiting

Begin assisted exercises

Gradually progress to active exercises

Begin hydrotherapy

Encourage normal function around waist level

## **8 Weeks**

Start stretching if appropriate

Add resisted exercises within pain limits

Start rotator cuff strengthening

Anterior deltoid strengthening as range of movement allows

Add closed chain exercises

Begin proprioceptive skills

Encourage functional movement within pain limits

Start driving if comfortable

Consideration should always be given to the individual patients' ability. The protocol is based on maintaining range of movement in the first phase and then gradually building strength in the middle to last phase. Progression should be tailored to the individual patient but the times quoted should be the earliest for active movement and when strengthening (resisted exercises) begins.

## **Return to Functional Activities**

These are approximate and will differ depending upon the individual. However, they should be seen as the earliest that these activities may commence.

Driving 6-8 weeks

Swimming

Breaststroke – MINOR/MEDIUM 6 weeks, MAJOR 12 weeks

Freestyle – MINOR/MEDIUM 3 months, MAJOR unlikely to progress

Golf 3 months

Lifting No heavy lifting for 3 months. After this be guided by the strength of patient

Return to work Dependant upon the patient's occupation.

With minor and medium tears, patients in sedentary jobs may return at 6 weeks.

Major tears may take at least 8 weeks.

Manual workers should be guided by the surgeon.

**Note:** These are guideline protocols only.

# **Manipulation Under Anaesthetic (MUA) / Arthroscopic Release of Shoulder Contracture**

An MUA and/or Arthroscopic release are performed for primary frozen shoulder (adhesive capsulitis), but not usually in the acute phase. Arthroscopic release is performed for post traumatic (post fracture) and post surgical stiffness.

The operation is performed under general anaesthetic with injection of local anaesthetic and steroid into the joint. Full range of motion is achieved operatively unless otherwise stated.

The procedure is done as a day case except where the patient has diabetes or other systemic problems where overnight stay may be indicated.

## **Protocol**

The patient is seen prior to discharge by the physiotherapist when passive and active range of motion is begun. It is important that the joint is taken through all planes of movement.

The patient is discharged with exercise and advice on pain control.

A physiotherapy appointment must be pre-arranged for the following day.

## **Aims of Physiotherapy**

Restore FULL range of movement as quickly as possible through passive and active assisted exercise, maintain this range

Encourage resumption of ADL immediately.

Exercising in water is particularly beneficial

Strengthen rotator cuff as appropriate

## **3 Weeks**

The patient attends for review at the Reading Shoulder Surgery unit

The patient will continue with physiotherapy if indicated and is usually discharged at this stage.

### **3 Months**

The patient attends for review at the Reading Shoulder Surgery unit and is usually discharged at this stage.

#### **Return to Functional Activities**

Driving 1 week

Return to Work Dependant on the patient's occupation

Golf 6 weeks, (but not driving range)

Racquet Sports Sport specific training when comfortable Competitive play after 3 months

Lifting as able

# **Copeland Surface Replacement Arthroplasty of the Shoulder**

## **Introduction**

This operative procedure is performed in cases of severe Osteo or Rheumatoid arthritis

where pain is the predominant feature.

The hemi arthroplasty is the usual method of choice.

Early mobilisation is encouraged.

As subscapularis is released and reattached to the anatomical neck of humerus at the

end of the procedure, there should be no resisted internal rotation for the first three

weeks and care should be taken with the range of external rotation.

## **Pre op**

Patient assessment

Patient's Constant score recorded

Information given

## **Post op**

### **Day 1**

Mastersling with body belt fitted in theatre

Cryocuff to reduce inflammation

Finger, wrist and radio ulnar movements

Active elbow flexion and extension

Shoulder girdle exercises and postural awareness

## **Day 2 – Day 3-5 (Discharge)**

Body belt removed

Axillary hygiene taught

Continue using cryocuff

Exercises continue as above

Hand gripping exercise

Pendular exercises

Passive flexion/extension in scapular plane in supine

Continue with shoulder girdle exercises, postural awareness and include scapular setting .

## **Discharge (Day 3-5) to 3 Weeks**

Remove sling when comfortable

Pendular exercises continued

Isometric strengthening exercises of all muscle groups (except IR)

Begin passive abduction (maintain shoulder in IR)

Begin passive external rotation to neutral only.

Begin active assisted flexion in supine and progress to sitting position as soon as the patient is able. Progress to active when possible.

Encourage relaxation and breathing control

Hydrotherapy may begin if available

## **3 Weeks – 6 Weeks**

Encourage the patient to actively move into all ranges. Gentle assisted stretching exercise to increase range - do not force inner range ER

Add isometric IR – sub maximally and only if painfree

Commence isometric theraband exercises - resistance dependant on individual

**N.B.** Take care with IR

Progress to isotonic strengthening

Encourage proprioceptive exercises-weight and non weight bearing

## **6 Weeks**

Progress strengthening and include anterior deltoid exercises

Continue to regularly stretch the joint to end of its available range

Can begin breaststroke if pain and range of movement allows

How well the patient progresses and the outcome will depend on the condition of the joint and soft tissues preoperatively. A better outcome is expected with patients whose joint is replaced for primary OA.

Improvement continues for 18 months to 2 years and where possible the patient should not be discharged or should continue exercising until their maximum potential has been reached. The protocol outlined applies to patients with an intact rotator cuff. If a rotator cuff repair has been carried out in addition to the above procedure, the therapist should adhere to the strengthening protocol for the repair.

## **Return to Functional Activities**

These are approximate and may differ depending upon each patient's individual achievements. However, they should be seen as the earliest that these activities may commence.

Driving After 4 weeks

Swimming

Breaststroke 6 weeks,

Freestyle 3 months

Golf 3 months

Lifting Light lifting can begin at 3 weeks. Avoid lifting heavy items for 6 months.

Return to work - Dependant upon the patient's occupation:

Those with sedentary jobs may return at 6 weeks.

Manual workers or those whose occupations demand excessive shoulder use should be guided by the surgeon.

# **Stemmed Hemiarthroplasty for Fracture**

## **Post op**

### **Day 1**

Mastersling with body belt fitted in theatre

Cryocuff to reduce inflammation

Finger, wrist and radio ulnar movements

Active assisted elbow flexion and extension

Teach axillary hygiene

Hand gripping exercises

Shoulder girdle exercises and postural awareness Continue the exercises above for 3 weeks at which time the patient will be reviewed at The Shoulder Unit.

### **3 Weeks**

Body belt removed

Commence pendular exercises

Continue with shoulder girdle exercises, postural awareness and include scapular setting

### **6 Weeks**

Gradually discard sling

As pain allows progress to full passive range of movement

Add active assisted progressing to active exercises

Introduce anterior deltoid strengthening exercises as appropriate

Isometric strengthening of all groups and progress to isotonic, as the patient is able

Can begin hydrotherapy where available

Can encourage the patient to move through all ranges with attention to self-stretching at end of range

Proprioceptive exercises and core stability work as required

## **Return to Functional Activities : (earliest recommendations)**

Driving 8 weeks (dependent on ease of movement and safety)

Swimming

8 weeks for breaststroke,  
freestyle will take longer

Golf - 3 months

Light lifting can begin at 8 weeks. Avoid lifting heavy items for 6 months

Return to work - The patient should be guided by the surgeon.

N.B. The protocol for a shoulder replacement following a fracture is less aggressive than that of the Copeland Shoulder Replacement due to the bony injury and the need to protect the healing of the tuberosities.

Active movement is delayed to allow for bony union. Progression will be slower. Use pain and the patient's ability as your guide.

Please check with the relevant Consultant for individual variances to the protocol.

# Verso - Reversed Total Shoulder Replacement

The Reverse Geometry Total Shoulder Replacement is designed for use in shoulders that have

a severe arthritis with a deficient rotator cuff (Rotator cuff arthropathy) or following complex

fractures with a deficient rotator cuff. This has caused pain and loss of active movement in

the arm.

The Verso prosthesis changes the orientation of the shoulder such that the normal socket

(glenoid) is replaced with an artificial ball, and the normal ball (humeral head) is replaced with

an implant that has a socket into which the ball rests.



The design changes the mechanics of the shoulder allowing pain relief and an improvement

in function and stability, particularly when using the arm in front and above shoulder level.

The operation is carried out under general anaesthetic and a nerve block, with the incision

being approximately three inches long on the front-side of the shoulder.

The arm is then placed in a sling with body belt.

## **Post Op**

### **Day 1**

Mastersling with body belt fitted in theatre

Cryo-cuff administered to reduce inflammation

Finger, wrist and radio-ulnar mobilising exercises

Active elbow flexion and extension started

Shoulder Girdle exercises and postural awareness

### **Day 2 – 5 (Discharge)**

Body belt removed – stay in sling

Axillary hygiene taught

Continue Cryo-cuff

Maintain exercises as above

Start GENTLE pendular swinging in forward leaning

### **Week 1 – 3**

Start PASSIVE shoulder exercises – Flexion/extension, Int/external rotation

(Do NOT force any movement) as instructed by your physiotherapist

Use analgesia as required, regularly, to allow maximum comfort during all arm exercises and daily functions

Start Scapular setting exercises

Continue pendular exercises as above

Continue shoulder, elbow, wrist and hand exercises

Stay in sling except when exercising

### **Week 3 – 6 - Clinic Review**

Start formal physiotherapy – to increase range of motion.

Avoid forcing any movement. Do not push the shoulder into painful positions.

Start the Deltoid Regime – see A4 booklet given to you in hospital, under the instruction of your physiotherapist

Wean from sling as comfortable but always wear sling when outdoors.

Continue to stretch regularly throughout the day, where possible in lying, maintaining good range of movement in the elbow, wrist and hand.

Slowly increase the daily use of the arm, but avoid painful activities

### **Week 6 – 12**

Continue with physiotherapy, as instructed

Increase the Deltoid regime as described in the hospital booklet

Stop wearing the sling

Continue stretches maximising range of motion in all directions

Use the arm and hand as fully and normally as possible, in comfortable positions.

### **Week 12 - Clinic Review**

Continue stretches maximising range of motion in all directions

Continue with physiotherapy, as instructed

Increase the Deltoid regime as described in the hospital booklet

Use the arm and hand as fully and normally as possible, in comfortable positions.

# **Arthroscopic / Open Anterior Stabilisation**

The operative procedure is performed to correct recurrent dislocations and will involve

soft tissue, and/or bony reconstruction.

Details regarding the pathology can be obtained from the Reading Shoulder Surgery

Unit, which may include Bankart, SLAP or Hill-Sachs lesions.

## **Day 1 Post-op**

Mastersling with body belt attached for 3 weeks.

Finger, wrist and radio-ulnar and scapular movements.

Assisted elbow flexion and extension in standing (in sitting with SLAP lesion)

Teach axillary hygiene

Teach postural awareness

To go home when comfortable

## **3 Weeks**

Patient attends for review and removal of stitches and body belt at The Reading Shoulder Surgery Unit.

Gentle pendular exercises, flexion/extension and circumduction only

## **6 Weeks**

The sling is removed and the patient begins formal physiotherapy, including hydro.

## **Aims of Physiotherapy**

Regain scapular and gleno-humeral stability working for shoulder joint control.

Gradually increase range of movement – do not push external rotation.

Strengthen the rotator cuff muscles.

Increase proprioception, using open and closed chain exercise.

Core stability work as appropriate

No abduction coupled with external rotation until 3 months.

## **Return to Functional Activities**

Driving 8 weeks

Return to work Light duties as tolerated after 6 weeks Heavy duties  
at 3 months

Swimming

Breaststroke at 8 weeks

Golf - 3 months

No Contact sports for 6 months - Contact sport including: horse  
riding, rugby, football, martial arts, racquet sports, wind surfing,  
handgliding and rock climbing.

# **Modified Weaver-Dunn Procedure for Reconstruction of the AC Joint**

This operative procedure aims to stabilize the acromio-clavicular joint.

## **Day 1 Post-op**

Master sling and body belt attached for 6 weeks

Finger, wrist and Radio-ulnar movements

Supported elbow flexion and extension in standing

Teach axillary hygiene

Teach postural awareness

Home when comfortable

## **3 Weeks**

The patient is reviewed at the Reading Shoulder Surgery Unit. The arm remains in the mastersling until week 6, but the bodybelt is removed.

Start gentle pendular exercises

## **6 Weeks**

The sling is removed and the patient begins formal physiotherapy

Avoid all range of movement above shoulder height until 12 weeks.

## **Aims of Physiotherapy**

Regain scapular and gleno-humeral stability working for shoulder joint control rather than range

Gradually increase range of movement

Strengthen the rotator cuff muscles

Progress proprioception through open and closed chain exercises.

## **Return to Functional Activities**

Driving 6 weeks

Return to Work Light duties as tolerate Heavy duties at 4 months

Swimming

Breaststroke 8 weeks

Golf 3 months

Contact sport 6 months - including horse riding, football, rugby,  
martial arts, racquet sports, and rock climbing , heavy Lifting 4-6  
months

## For further information:

Physiotherapy Department  
Berkshire Independent Hospital  
Tel: 0118 902 8055

Physiotherapy Department  
Royal Berkshire Hospital  
Tel: 0118 322 7811

## Reading Shoulder Unit

Mr Stephen A Copeland, FRCS

Mr Ofer Levy, MD, M.Ch (Orth)

Mr Giuseppe Sforza MD

Berkshire Independent Hospital  
Tel: 0118 902 8000 (Switchboard)  
Tel: 0118 902 8063 (Mr Copeland)  
Tel: 0118 902 8116 (Mr Levy / Mr Sforza)

Mr Levy NHS Secretary -  
Royal Berkshire Hospital  
Tel: 0118 322 7427

Further information is also available from:  
[www.readingshoulderunit.com](http://www.readingshoulderunit.com)

© Reading Shoulder Unit