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Manipulation under anaesthetic (MUA) and arthroscopic capsular release (ACR)

This information aims to help you gain the maximum benefit and understanding of your operation.

It includes the following information:

- Key points
- About your shoulder
- About the operation
- Risks and alternative solutions
- Frequently asked questions
- Exercises
- Contact details
- Useful links

Key points

If you are considering having an MUA or arthroscopic capsular release, remember these key points:

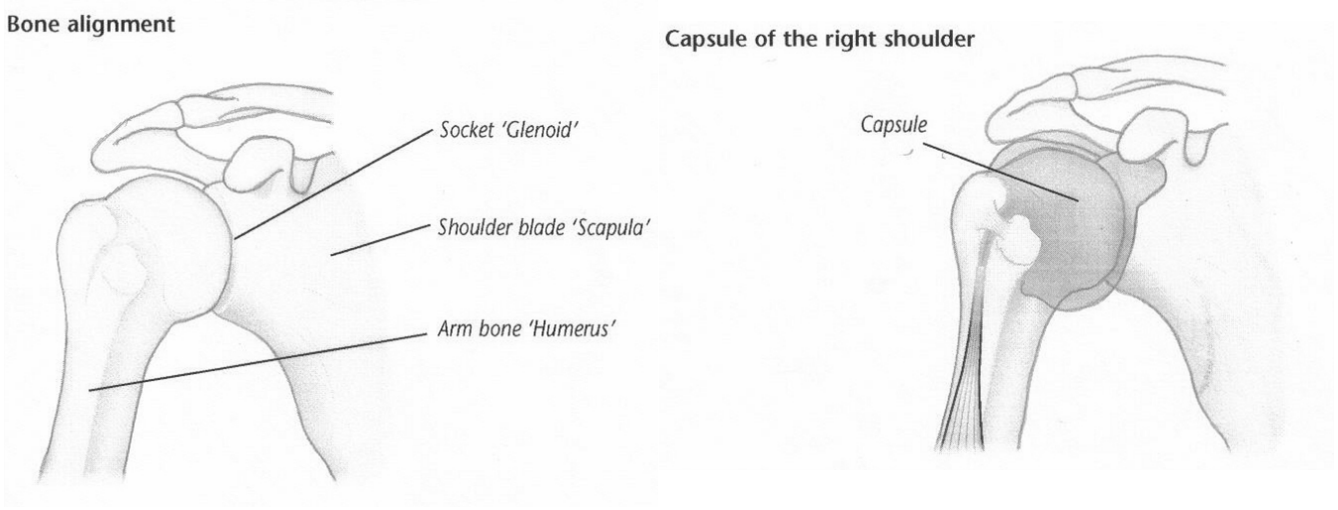
1. Nearly all are done as day case surgery (home the same day).
2. You will have a general anaesthetic (you will be asleep).
3. The arm will be painful for the first week.
4. You will not need a sling beyond 1 or 2 days.
5. You will need intensive physiotherapy in the early post-operative period to stop it stiffening again.
6. Most people are driving within 2-3 weeks.
7. Most people return to work once they can drive although it may be longer if you are a manual worker.
8. You can return to sport as soon as you feel able to do so.
9. This is a safe, reliable and effective operation for 90% of people.
10. During the first 3 weeks, despite your best efforts, it is common to lose some of the motion that had been recovered during the operation, however this will improve again over the next month or so.
11. www.shoulderdoc.co.uk is a reputable and useful British website for further information.

About your shoulder

The shoulder is designed to give a large amount of movement. Some movement occurs between the shoulder blade and chest wall. However, most shoulder movements are at the ball and socket joint.

The ball at the top of your arm bone (humerus) fits into the shallow socket (glenoid) which is part of the shoulder blade (scapula). There is a loose bag or ‘capsule’ that surrounds the joint (see picture below). This is supported by ligaments and muscles.

Right shoulder (viewed from the front)



Why the shoulder requires manipulation under anaesthetic or arthroscopic capsular release

Your shoulder has become inflamed and tight. Often this is due to a ‘frozen shoulder’. This process can start without apparent cause. Sometimes, the pain and tightness follows a minor accident/injury, or after an operation. Other times, it is associated with diabetes. It can be a problem for 12 to 24 months, sometimes even longer. About 20% of people with a frozen shoulder get it again on the other side.

Other people have a stiff shoulder because of an earlier major injury. In this case, the inflammation is less of a problem but the tightness of the capsule due to scarring is preventing good movement.

About manipulation under anaesthetic and arthroscopic capsular release

The aim of the manipulation under anaesthetic operation is to try and increase the range of movement in your shoulder. The tight capsule will be torn by forceful but careful and controlled stretching of the arm while you are asleep.

The operation may also include keyhole surgery or ‘arthroscopy’. In this case 2 or 3 small incisions (5mm) will be made around your shoulder in order for the arthroscope and the specialist releasing instruments to be passed into the joint. The scarring and tight capsule will be carefully released from the inside in order to improve your shoulder movements (arthroscopic capsular release).

What are the risks of the operation?

All operations involve an element of risk. We do not wish to over-emphasise them but feel that you should be aware of them before and after your operation. Please make sure you discuss any concerns with the doctors/consultant.

The risks include:

a) **Anaesthetic complications** such as sickness and nausea, or rarely cardiac, respiratory or neurological (less than 1% each, i.e. less than one person out of one hundred).
b) **Infection:** This is usually a superficial wound problem and does not occur for a procedure involving MUA only. Occasionally deep infection may occur after the operation (less than 1%).
c) **Failure of the operation to improve the pain or movement** in your shoulder (up to 30%).
d) **Nerve and blood vessels damage** (less than 1%).
e) **Fracture of the upper arm bone** (less than 1%).

Please discuss these issues with the doctors if you would like further information.

What are the alternatives?

You probably have tried most of the alternative solutions for your **shoulder pain** before considering surgery. Not all these options are appropriate for all people.

They include:

- Modifying activity and sport to avoid the pain.
- Taking painkillers and/or anti-inflammatory tablets.
- Cortisone injections.
- A “hydrodilatation” procedure (ultrasound guided injection to stretch the joint capsule).
- Physiotherapy and other allied specialities such as acupuncture and osteopathy.
- Seeking the advice of a sports professional.

The alternative solutions for **the shoulder stiffness** include:

- Waiting for the stiffness to get better naturally. If you are suffering from a frozen shoulder then the stiffness will get better naturally over the course of 18 months to 2 years even if you have no treatment whatsoever. If you are diabetic then the stiffness may take much longer to go away and indeed may never disappear entirely.
- If your shoulder is stiff as a result of a major injury then there may be some natural improvement for up to 18 months. After that you may choose to simply put up with the stiffness.
- Physiotherapy, stretching exercises and swimming can all help but only once pain is no longer a major issue.

Questions that we are often asked about the operation

Will it be painful?

Please purchase packets of tablets such as paracetamol (painkillers) and anti-inflammatories (e.g. nurofen, ibuprofen, diclofenac) before coming into hospital.

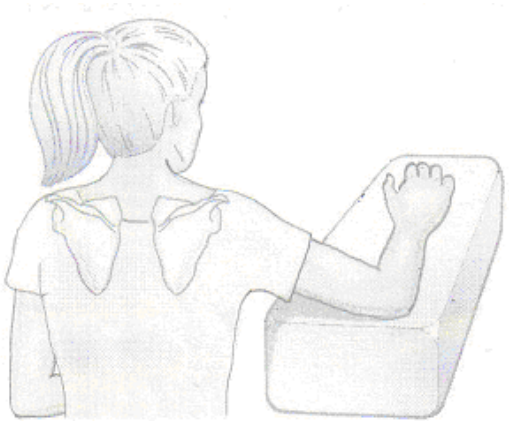
- During the operation local anaesthetic will be put into your shoulder to help reduce the pain.
- The anaesthetist may discuss the option of numbing the whole arm for a few hours after the operation.
- Be prepared to take your tablets as soon as you start to feel pain.
- Take the tablets regularly for the first 2 weeks and after this time only as required.
- If stronger tablets are required or if you know that you cannot take paracetamol or anti-inflammatories talk to your GP.
- The amount of pain you will experience will vary and each person is different. Therefore, take whatever pain relief you need.

You may find ice packs over the area helpful. Use a packet of frozen peas, placing a piece of wet paper towel between your skin and the ice pack. Use a plastic bag to prevent the dressings getting wet until the wound is healed. Leave on for 10 to 15 minutes and you can repeat this several times a day.

Do I need to wear a sling?

You will return from the operation wearing a sling; however, this is for comfort only. Do not feel you have to use it. Remember, this operation has been done to try and increase movement, **so do not keep your arm in the sling for long periods without doing regular exercises**. Discard the sling when you feel able. Try to rest with your arm supported out to the side, in front of you or behind your head (see pictures).

To begin with, you may need to rest with a pillow/towel under elbow.



Sleeping

At night, if you lie on your back, you may find placing a thin pillow or rolled towel under your arm helpful. If you lie on your good side, try a pillow (or two) in front of you, it will stop your painful arm flopping forwards.

Do I need to do exercises?

Yes definitely. The exercises are designed to try and maintain any increased movement at surgery. You will be shown exercises to move your shoulder and *you need to continue with these at home, straight away.*

Outpatient physiotherapy should be arranged to start within 24 to 48 hours of the surgery. **Please ensure that you have a physiotherapy appointment arranged before going in to hospital to have the surgery**.

You will start an exercise programme to gradually regain movements and the exercises will be changed as you progress.

You will need to get into the habit of doing regular daily exercises at home for several months. They will enable you to gain maximum benefit from your operation.

A selection of exercises are shown at the back of this booklet.

What do I do about the wounds?

If you have only had a manipulation under anaesthetic there will be no wounds. If you have had an arthroscopic capsular release there will not be any stitches but there will be dressings over the wounds. Keep the wounds dry until they are healed, which is normally within 5-7 days. You can shower / wash and use ice packs but protect the wound with cling film or a plastic bag. Avoid using spray deodorants, talcum powder or perfumes near or on the scar.

When do I come to clinic?

This is usually arranged for about three months after your operation to check how you are progressing. Please discuss any queries or worries you have at this time. Further appointments will be made after this as necessary.

Are there things that I should avoid doing?

The only thing to avoid is keeping the shoulder still.

Although you may not like tablets, try to keep the level of pain down and exercise regularly to keep the joint moving. Remember, you can also try using ice packs or heat (hot water bottle will do fine). In addition rest with the arm supported away from your side.

How I am likely to progress?

This can be divided into two phases.

Phase 1. Getting over the ‘operation pain’

- The initial increase in pain for the first few weeks may affect your ability to do everyday activities, especially if your dominant hand (right if you are right handed) is the side of the operation.
- Try to use your arm for daily activities, particularly if the joint feels stiff more than painful. Even though the shoulder is painful, you need to try and do regular exercises; little and often. Outpatient physiotherapy will normally start as soon as possible. Take medication and use ice/heat to try and keep the pain level down.

Phase 2. Regaining everyday movements

- The pain from surgery should gradually lessen and you will be able to exercise more frequently and vigorously. Normally the change in movement occurs within 4-6 weeks of the operation.
- Some movements improve more quickly than others. Getting your hand up behind your back is often the last and most difficult movement to recover.
- Even though regaining perfect movement is unlikely, you may find that even small gains may improve your ability to do everyday activities. Unfortunately, the results may be less good if you have diabetes, but this is not always the case.

When can I drive?

Normally, within two to three weeks after the operation. Check you can manage all the controls. It is also advisable to start with short journeys. The seat-belt may be uncomfortable initially but your shoulder will not be harmed by it.

When can I return to work?

This will depend on the type of work you do. If you have a desk-type job you will probably be off work for one to two weeks. However, if you are involved in lifting or manual work you may not be able to do these for 4 weeks. Please discuss any queries with the physiotherapist or hospital doctor.

When can I participate in leisure activities?

Your ability to start these will be dependent on the range of movement and strength that you have in your shoulder following the operation. Nothing is forbidden. Please discuss activities that you are interested in with your physiotherapist or consultant. Start with short sessions, involving little effort and gradually increase.

You can try movements in water as soon as the wounds are healed. Doggy paddle or breast stroke may be easier initially. You can exercise the rest of your body immediately. Try to regain the natural swing of your arm as you walk.

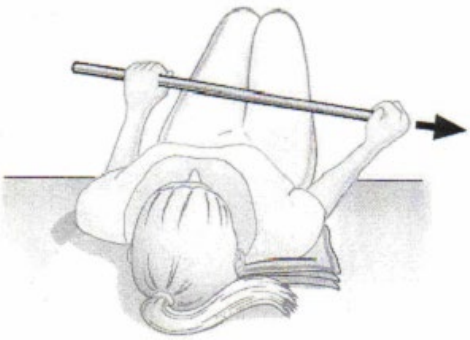
Exercises

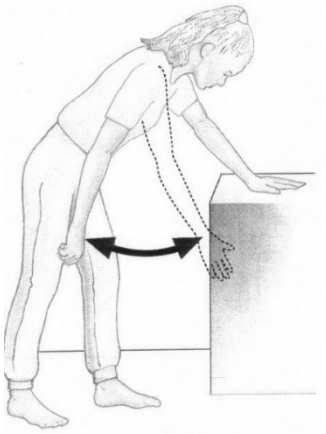
- Use painkillers and/or ice packs to reduce the pain before you exercise.
- *It is normal for you to feel aching, discomfort or stretching sensations when doing these exercises.* However, if you experience intense and lasting pain (e.g. more than 30 minutes) reduce the exercises by doing them less forcefully or less often. If this does not help, discuss the problem with the physiotherapist.
- Certain exercises may be changed or added specifically for your shoulder.
- Do short frequent sessions (e.g. 5-10 minutes, 4 times a day) rather than one long session.
- Gradually increase the number of repetitions you so. Aim for the repetitions that your therapist advises, the numbers states here are rough guidelines.

1. Lying, sitting or standing, elbow to your side

Hand starts near your stomach. Take hand away from stomach but keeping the elbow tucked in. This twists the shoulder joint. Can support/add pressure with a stick held between your hands.

Repeat 10 times.





2. Stand, leaning well forwards.

Let your arm hang down.

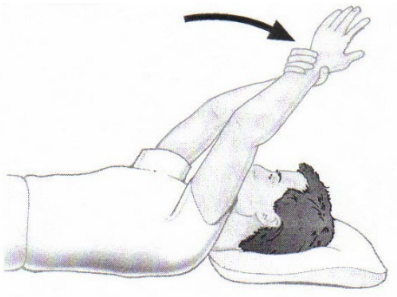
Swing arm:

a) forwards and backwards.

b) side to side.

c) round in a circle.

Repeat 10 times.



3. Lying on your back, knees bent, feet flat on the bed/floor. (Shown for left shoulder.)

Support your operated arm with the other arm and lift it up overhead.

Do not let your back arch.

Repeat 5-10 times.

Repeat this movement but with your elbows bent. Hands holding elbows (like ‘Russian dancing’). Aim to stretch elbows overhead. Do not let your back arch. Repeat 5-10 times.

4. Kneeling on all fours

Keep your hands still and gently sit back towards your heels.

Repeat 5-10 times.

5. Sit or stand

Hold a stick or umbrella between hands.

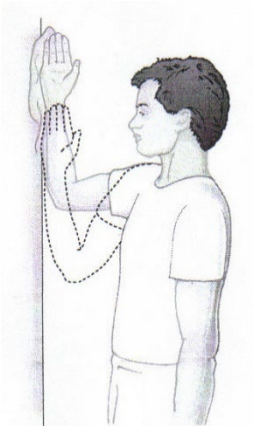
Keep shoulder down and push operated hand out to the side.

Try not to move your body.

Repeat 5-10 times.

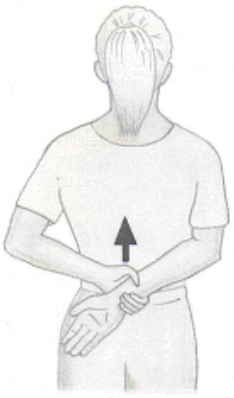
6. Standing facing a wall

Place a tea towel or duster between hand and wall.
Slide hand up wall.
Try to keep your shoulder down.
Repeat 5-10 times.



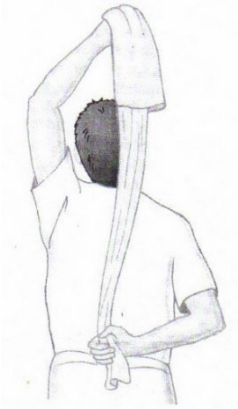
7. Standing with arms behind your back

Grasp the wrist of your operated arm and
a) gently stretch hand towards the opposite buttock.
b) slide your hands up your back.
Repeat 5 times



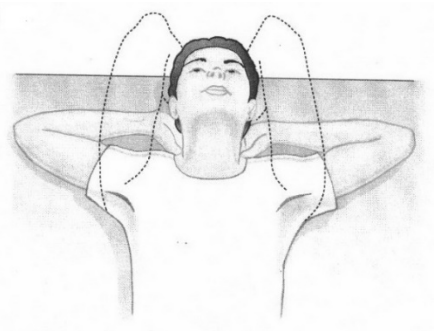
8. Standing with arms behind your back

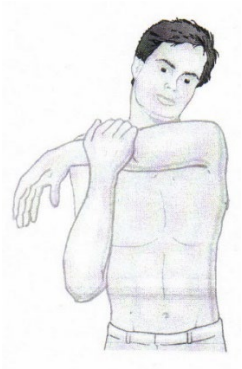
Use a towel in the other hand to stretch it.
Repeat 5 times.



9. Lying on back, knees bent and feet flat

Place hands behind neck or head, elbows up towards the ceiling. Let elbows fall outwards.
Repeat 5 times.





10. Stand or sit (shown for left shoulder)

Take hand of your operated arm across body towards opposite shoulder.

Give gentle assistance from your other arm.

Repeat 5 times.

Contact details

Clinical Admin Team (CAT5)
Tel: 0118 322 7415
Email: CAT5@royalberkshire.nhs.uk

Useful links

www.shoulderdoc.co.uk
www.orthogate.org/patient-education

This leaflet is not a substitute for professional medical care and should be used in association with treatment at your hospital. Individual variations requiring specific instructions not mentioned here might be required. It was compiled by Mr Harry Brownlow (Consultant Orthopaedic Surgeon), Mr Amar Malhas (Consultant Orthopaedic Surgeon), Emma Lean and Catherine Anderson (Specialist Physiotherapists) and is based on the information sheet produced by Jane Moser (Superintendent Physiotherapist) and Professor Andrew Carr (Consultant Orthopaedic Surgeon) at the Nuffield Orthopaedic Centre in Oxford.

Contacting the ward

If you have any concerns or problems following your discharge, you can contact the ward for general advice by telephoning:

Chesterman Ward	0118 322 8847
Redlands Ward	0118 322 7484 / 7485
Trauma Unit (Trueta Ward)	0118 322 7541
Adult Day Surgery Unit	0118 322 7622
Pre-op Assessment	0118 322 6546

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To find out more about our Trust visit www.royalberkshire.nhs.uk

Please ask if you need this information in another language or format.

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Next review due: April 2027