

Rotator Cuff Repair

This information has been produced to help you gain the maximum benefit and understanding of your operation.

It includes the following information:

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

Key Points

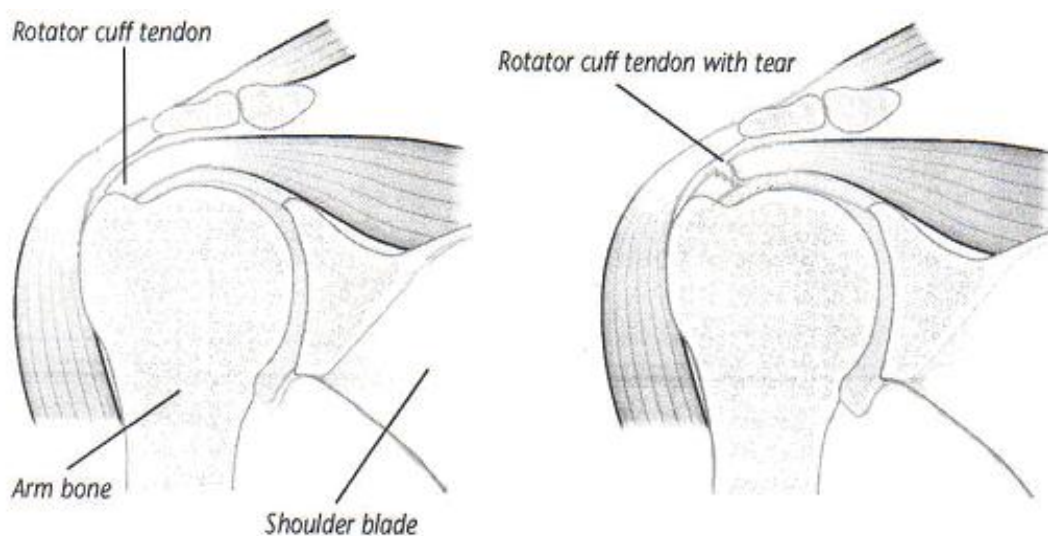
If you are considering having a rotator cuff repair remember these key points

1. this is a good operation for pain relief but it is less reliable at improving movement and will not restore normal strength to the arm
2. nearly all are done as day case surgery (home the same day)
3. you will have a general anaesthetic
4. you will be given an injection to numb the arm so that you don't have pain when you wake up. The arm may feel 'dead' for up to 48 hours afterwards
5. you will be in a sling for up to 6 weeks
6. you will not be driving for at least 6 weeks
7. up to 3 months before returning to work (if a manual worker) but much sooner if not a manual worker
8. you can return to sport in a progressive fashion but not competitively for 3 months
9. this is a safe, reliable and effective operation for 90% of people
10. this is not a quick fix operation - improvement in symptoms may take many months to occur
11. www.shoulderdoc.co.uk is a reputable and useful British website for further information

About your shoulder

The rotator cuff

The rotator cuff is a group of muscles closely wrapped around the shoulder. They attach from the shoulder blade onto the top of the arm bone (humerus). These muscles help keep the joint in the correct position and control shoulder movements. The muscles can be torn through general wear and tear or after an accident. The damage usually occurs close to where the muscle joins the bone (called the 'tendon'). If one or more of these muscles is torn, movement is no longer smoothly controlled and the shoulder becomes weak and painful. See *pictures below*.



About your rotator cuff operation

The operation aims to re-attach the tendon(s) to the bone. Sometimes, the tear is too big and/or the tendon is too fragile for this to be possible and only a partial repair can be achieved.

The repair involves sewing the torn tendon back onto the bone. The operation is usually done by keyhole surgery ('arthroscopy') although occasionally it may be necessary to perform the operation through a cut on the front of the shoulder. Most people are given a full general anaesthetic, i.e. you will be asleep. Several 5mm puncture wounds are made around the shoulder to allow entry of the arthroscopic instruments. One of the instruments is a camera which allows the surgeon to thoroughly inspect the inside of the shoulder joint. The tendon is repaired using special bone anchors. These anchors are like small screws which are placed into the bone. Attached to the screw are a number of stitches which can be weaved through the torn tendon which allows the tendon to be firmly reattached back to bone (*see picture right*).



What are the risks?

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. The risks include:

- a) **Anaesthetic** complications such as sickness, nausea or rarely cardiac, respiratory or neurological (less than 1% each, i.e. less than one person out of one hundred).
- b) **Infection**. These are usually superficial wound problems. Occasionally, deep infection may occur many months after the operation (rare; less than 1%).
- c) **Pain** and **stiffness** in the shoulder. About 20% of patients will still have some symptoms after the operation. About 5% of patients develop painful stiffness (frozen shoulder) which gradually improves with time and physiotherapy over several months.
- d) **Failure** to repair the muscle because it is too badly torn. Despite this the operation usually improves the pain but movement and strength may be no better.
- e) **Nerve** and **blood vessel injury** around the shoulder (rare; less than 1%).
- f) **Revision surgery**. Sometimes the tendon can tear again and this may require further surgery.
- g) **Weakness** above shoulder height. Most people never recover completely normal strength above shoulder height.

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.
- Physiotherapy and other allied specialities such as acupuncture and osteopathy.
- Seeking the advice of a sports professional.

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 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 5 to 10 minutes and you can repeat this frequently (4- 8 times) throughout the day.

Do I need to wear a sling?

Yes, it is extremely important to protect the tendon repair by using a sling day and night following the operation. This also makes your arm more comfortable. You

will be shown how to get your arm in and out of the sling by a nurse or physiotherapist.

You will wear the sling for up to 6 weeks depending on the size of the repair / consultant's guidelines.

You may find your armpit becomes uncomfortable whilst you are wearing the sling for long periods of time. Try using a dry pad or cloth to absorb the moisture. Alternatively, wear a loose T shirt under the sling.

If you are lying on your back to sleep, you may find placing a small towel or pillow under your upper arm will be comfortable.

When can I go home?

Often you can go home the same day although some people prefer to stay for one night.

Do I need to do exercises?

Yes! To begin with you will be moving the elbow, wrist and hand joints **only**, using the specific exercises which the physiotherapist will show you. You will continue with these exercises at home for between 3 to 6 weeks depending on your particular operation. Outpatient physiotherapy appointments will be organised to start after this. However, if your shoulder is particularly sore or you are having problems with the exercises, you will be seen earlier.

You 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.

Some of the early exercises are shown at the back of this booklet.

What do I do about the wound?

You will not have any stitches, only small sticking plaster strips over two or three small wounds. Keep the wounds dry until they are healed, which is normally within 5-7 days. You must keep them covered when showering or bathing for the first week.

When do I return to the outpatient clinic?

This is usually arranged for about 3 weeks (although this is often with the physiotherapist and you may not need to see your consultant for 3 months) after your operation to check on your progress. Please discuss any queries or worries you may have when you are at the clinic. Further clinic appointments are made after this as necessary.

Are there things that I should avoid?

For at least 3 weeks (possibly 6 weeks, depending on your operation):

- Do not try and use the arm for everyday activities, especially those taking your elbow away from your body because this may damage the repair. Keep it in the sling, except when you are doing your exercises. Continue with this until you are told otherwise by the consultant, hospital doctor or physiotherapist.
- Do not let your elbow move or stretch across the front of your body. This can happen at night when you are lying on your un-operated side. So, once you stop using the sling, place your arm on pillows in front of you.



For 6 weeks:

- Do not lie on your operated side. After this time be guided by pain. Avoid lifting any weight for 8-12 weeks (e.g. a kettle). This is to avoid stressing the repaired muscle. Heavier lifting (e.g. digging the garden, manual work) should be avoided for 4-6 months.

There may be other movements that are restricted for you. You will be told if this is the case.

Within these general instructions be guided by pain. It is normal for you to feel discomfort, aching and stretching sensations when you start to use your arm. Intense and lasting pain (e.g. for 30 minutes) is an indication to reduce that particular activity or exercise. In addition, avoid sudden, forceful movements involving weight.

How am I likely to progress?

It is important to recognise that improvement is slow and that this is not a quick fix operation. By 3 to 6 months after the operation, most people have noticed an improvement in their symptoms and are pleased with their progress. Everything continues to improve slowly for up to 18 months although by 9 to 12 months after the operation your shoulder should feel almost back to normal.

Progress can be divided into three phases:

Phase 1. Sling on, no movement except for exercises.

You will basically be one-handed, immediately after the operation and for the first 3 weeks, or up to 6 weeks (depending on **your** operation). This will affect your ability to do everyday activities, especially if your dominant hand (right if you are right-handed) is the side with the operation. Activities that are affected include dressing, bathing, hair care, shopping, eating and preparing meals.

1. **Getting on and off seats.** Raising the height can help, e.g. extra cushion, raised toilet seat, chair or bed blocks.
2. **Getting in and out of the bath.** Using bath boards can help, though initially you may prefer to strip wash.
3. **Hair care and washing yourself.** Long-handled combs, brushes and sponges can help.
4. **Dressing.** Wear loose clothing, either with front fastening or that you can slip over your head. For ease also remember to dress your operated arm first and undress your operated arm last. In addition, dressing sticks, long-handled shoe horns, elastic shoe laces and a 'helping hand' may help.
5. **Eating.** A non slip mat and other simple aids can help when one handed. Use your operated arm once it is out of the sling as you feel able.
6. **Household tasks/cooking.** Do not use your operated arm for activities involving weight (e.g. lifting full kettle, iron, saucepan) for 3-4 weeks after the removal of the sling. Light tasks can be started once your arm is out of the sling. To begin with you may find it more comfortable keeping your elbow into your side.

Phase 2. Regaining everyday movements.

This starts once you are given the go-ahead by the hospital doctors or physiotherapist (between 3-6 weeks after your operation). You will have outpatient physiotherapy and start exercises to gain muscle control and movement. The arm can now be used for daily activities; initially these will be possible at waist level but gradually you can return to light tasks with your arm away from your body.

Phase 3. Regaining strength.

After 12 weeks you will be able to increase your activities, using your arm away from your body and for heavier tasks. The exercises now have an emphasis on regaining strength and getting maximum movement from your shoulder. There are still some restrictions on lifting.

When can I drive?

It is illegal to drive while wearing a sling. You may start to drive once the sling has been discarded but not until you can safely control the vehicle. This is normally between 8 and 12 weeks after the operation. It is advisable to start with short journeys.

When can I return to work?

This will depend on the type of work you do and the extent of the surgery. If you have a job involving arm movements close to your body you may be able to return within 3 weeks. Most people return within 2 months of the operation but if you have a heavy lifting job or one with sustained overhead arm movement you may require 3 to 6 months off. Please discuss this further with the doctors or physiotherapist if you feel unsure.

When can I participate in my leisure activities?

Your ability to start these activities will be dependent on pain, range of movement and strength that you have in your shoulder. It is best to start with short sessions involving little effort and then gradually increase the effort or time for the activity. However, be aware that sustained or powerful overhead movements (e.g. trimming a hedge, some DIY, racket sports etc) will put stress on the sub-acromial area and may take several months to become comfortable.

Exercises

Use painkillers and/or ice packs (applied for 5-10 minutes) 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 for your particular 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 do. Aim for the repetitions your therapist advises, the numbers stated here are rough guidelines.

All pictures are shown for the right shoulder unless specified.

Phase 1 exercises (for 3 or 6 weeks)

Do all the exercises in this section unless the therapist specifically advises you not to. Repeat 3 or 4 times each day.

1. Neck exercises

Standing or sitting



Tilt your head to one side.
Repeat 5 times.
Then turn your head to the other side and repeat 5 times.

Tilt your head towards one shoulder.
Repeat 5 times.
Then tilt your head to the other

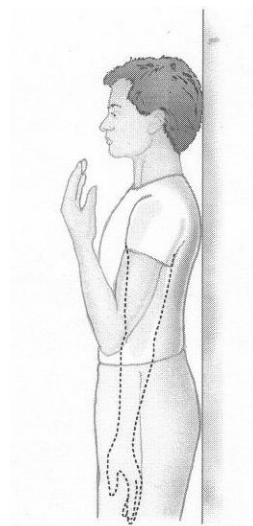
2. Elbow exercises

Standing or lying

Straighten your elbow and then bend your elbow

Repeat 5 times.

(Shown for left arm)

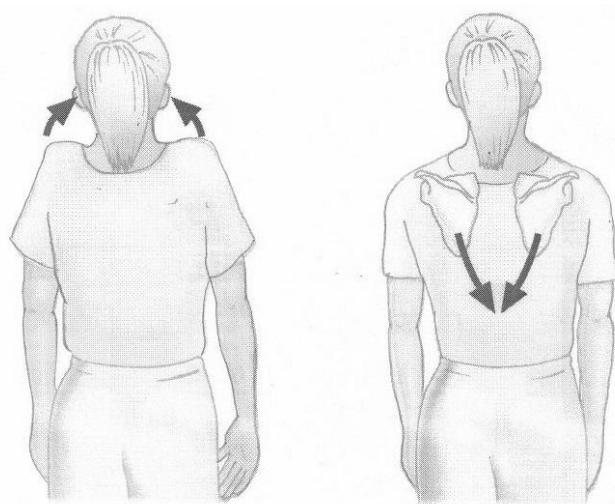


3. Shoulder blade exercises

Sit or stand

Shrug shoulders up and forwards.
Then roll them down and back.

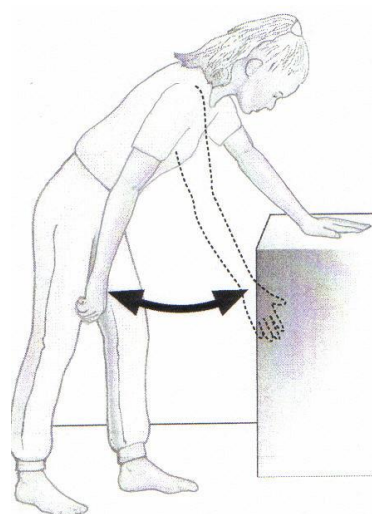
Repeat 10 times.



4. Shoulder exercises (after 3 – 6 weeks)

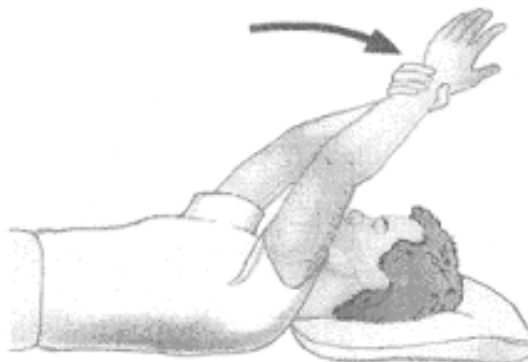
These are important to do

- a) **Stand, lean forwards**
Let your arm hang down.
Swing arm forward and
backwards.
Keep it **relaxed**.
Repeat 10 times.



b) Lying on your back on bed or floor.

Lift your operated arm with your other arm. Keep the operated arm as **relaxed** as possible. Can start with elbow bent.



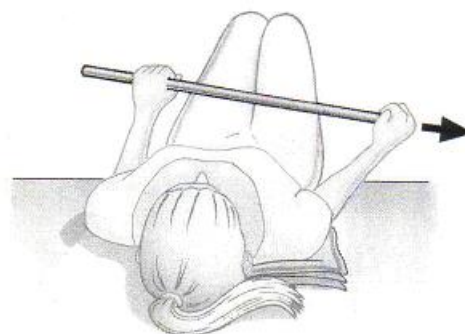
Repeat 5 times.

c) Lying on back (on bed or floor) with towel under shoulder or sitting

Keep elbow into your side and bent. Hold stick in your hands.

Move the stick sideways gently pushing the hand on your operated arm outwards.

Repeat 5 times.



Phase 2 exercises

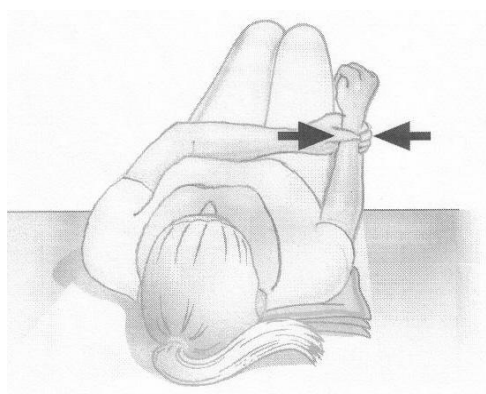
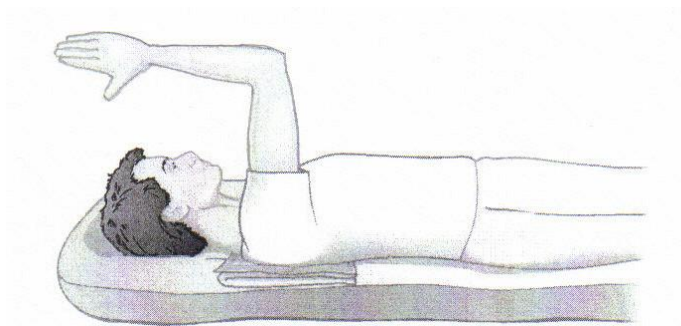
Only start these when advised to do so. This may not be for 6 weeks.

1. Lying on your back, elbow bent.

Help the operated arm up as before but once the arm is vertical, try and keep it there without support of the other arm.

Gradually lower and raise the arm in an arc, until you can lift it from the bed.

Repeat 5-10 times.



2. Lying on your back, elbow bent and close to side.

Can also be done sitting or standing.

Hold the wrist of your affected arm with your good hand.

Try and move your hand on the operated arm inwards **but prevent it from moving** by using the good hand.

Hold for 5 seconds.

Repeat 5 times and gradually increase to 20 times.

3. In the same position

In the same position, try and move the operated side hand outwards without allowing movement.

Hold for 5 seconds.

Repeat 5 times and gradually increase to 20 times.

Both exercises (2 & 3) can also be done standing or sitting.

4. Standing facing a wall.

Elbow bent and hand resting against wall. Use paper towel between hand and wall (to make it easier). slide

Slide your hand up the wall.

Initially, you can give support at the elbow with your other hand.

Gradually stretch higher up wall.

Try to make movement smooth.

Repeat 5 times and gradually increase to 15-20.

Progress by moving away from the wall.



5. Standing with arms behind your back.

Grasp the wrist of your operated arm.

Gently slide your hands up your back.

Repeat 5 times. Do not force.

Phase 3 exercises

These will concentrate on increasing the strength and mobility around your shoulder. The exercises will be selected for your individual shoulder and your lifestyle. Work hard at them as improvements in strength can increase for up to 2 years!

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www.readingorthopaediccentre.com

Useful links

www.readingorthopaediccentre.com

www.shoulderdoc.co.uk

www.orthogate.org/patient-education/shoulder/rotator-cuff-tears.html

http://hcd2.bupa.co.uk/fact_sheets/html/rotator_cuff_injury.html

<http://www.gpnotebook.co.uk/simplepage.cfm?ID=-758120435>

This information sheet 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), 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.