NHS
Royal Cornwall Hospitals
NHS Trust

Rotator cuff repair

affix patient label

What is the rotator cuff?

Although the shoulder is a type of ball and socket joint the socket is small and shallow and the ball is large. It needs normal healthy muscles around it to keep it stable and to work properly. The most important of these are a group of muscles called the rotator cuff. There are 3 parts to the rotator cuff: One at the front, one at the back and one that passes over the top of the shoulder joint.

Unfortunately the tendons of these muscles can tear, usually where they attach to the bone. This might happen because of injury. It might happen because the tendons catch underneath the bony tip of the shoulder (the acromion) a process known as impingement. This is particularly common for the top part of the rotator cuff known as 'supraspinatus'. In some people the tear causes pain. In others they may get pain from impingement. The tear may cause weakness or it may stop the shoulder working completely.

Why do I need a repair?

A tear is suspected in one of your rotator cuff tendons, either from examination or following a test such as an ultrasound scan. We hope by repairing it, to get rid of most if not all of the pain in your shoulder. If your shoulder is not working well because of the tear we hope to improve your shoulder function.

Particularly in younger more active patients, repairing a small tear may stop it getting larger with time. If tears do get larger they can stop the shoulder working properly or lead to arthritis.

Are there any alternatives?

The torn tendon cannot heal naturally as it pulls away from its attachment when it tears. It may be possible to control the pain of a rotator cuff tear with simple painkillers and physiotherapy. Injections of steroid can also help if it is very inflamed. If you feel you have not had sufficient opportunity to try alternative treatments you should discuss this with your surgeon.

If most of your pain is coming from impingement (the painful catching of the tendon under the acromion) it may be possible to treat the pain simply by smoothing the bottom of the acromion. Especially in older patients whose shoulder is working well, this may be a good option. This procedure is known as a **decompression**. It takes less time to get back to your best after a decompression but your shoulder may still be a little weak.

In younger, more active patients or if the shoulder is not working well, repairing the tendon is generally the best option. Without treatment it may become impossible to repair the tendon.

How do I prepare for it?

You must **not** eat anything for at least **6 hours** before your operation. This is to make sure your stomach is empty when you have your anaesthetic. Drinks containing fats (eg tea or coffee with milk) and sweets all count as food. You **can** drink water or a drink without fats in it (eg black coffee) until **2 hours** before your operation. You may also have small sips of water to take tablets. There is a hospital leaflet about having an anaesthetic. Ask the staff for a copy if you would like one.

You may be given a general anaesthetic (where you will be asleep) or a local anaesthetic 'block' (where you are drowsy but awake and the area to be operated on is completely numb). Sometimes we will give both types of anaesthetic. The anaesthetist will come and see you before your operation to discuss this with you. You will have an opportunity to ask them questions about the anaesthetic.

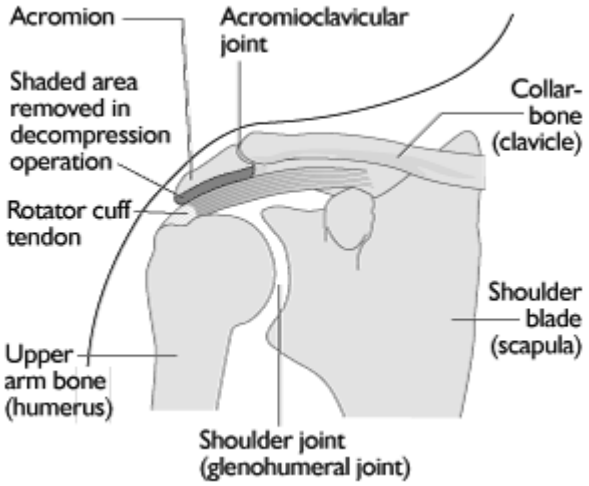
A member of the surgical team will also see you on the ward. Usually it will be the surgeon who will perform your operation. Feel free to ask them any question you have about the operation or what will happen to you afterwards. The surgeon may examine you again. They will also draw an arrow on the arm to be operated on and check that this consent form has been completed.

What does it involve?

The surgeon will examine your shoulder with you asleep. Your skin will be cleaned with antiseptic and nearby areas covered with sterile drapes. You will usually lie on your side for the operation with your arm held out on a support. Occasionally you may be in a sitting position.

The first part of the operation is a decompression or smoothing of the underside of the acromion. This removes any spikes of bone that may have been irritating the tendon and causing pain. It also makes sure that there will be nothing to damage the repaired tendon. This will generally be done through a keyhole or 'arthroscopic' technique. If the tear is very large the decompression can be done 'open' through the same cut as the tendon repair.

Sometimes as part of the decompression we will need to remove the joint between the collarbone and the shoulder blade. This is the AC (acromioclavicular) joint. If it is damaged or swollen it may cause pain or damage to the tendons that move below it. It can be removed without affecting the way your shoulder works.



(Image courtesy of the arthritis research campaign)

Next the surgeon will make a larger cut, 4-5 cm long over the outside of the arm, just beyond the point of the shoulder. Through this they will put stitches into the edge of the tear. These are fastened through tunnels or small metal anchors in the bone so that they draw the tendon back down to where it should attach. Very large tears may need to be done through a larger cut over the front of the shoulder. Your surgeon should discuss this with you if necessary.

The wound may be closed with stitches that are buried or absorb with time, or with clips. Very small cuts may be closed with strips of suture tape. Your arm will be put into a sling. This is for your comfort but also to protect the repair. You will then be taken to the recovery area for observation.

Biceps tenotomy

One of the two tendons that come from the biceps muscle passes into the shoulder joint and can be affected by impingement. If the tendon is damaged at surgery and the surgeon is concerned that it may continue to cause pain or further damage, they may cut it (tenotomy). This often happens naturally and generally does not cause any loss of function. It can change the shape of the biceps muscle however, and in lean muscular patients the change may be quite noticeable. You should ask your surgeon if you are concerned about this.

What happens afterwards?

If you have had a local anaesthetic injection into your neck before surgery, you may feel no pain at all when you wake up. If this is the case, you may also not be able to move your arm. Gradually, over some hours, the feeling will come back into your arm and you will be able to use it again. This is normal.

It will not always be necessary to have a local anaesthetic injection into the neck. In this case or if the local anaesthetic has not been effective, you may feel some discomfort or pain in the arm when you wake up. It is important at every stage to let the staff know if you have pain and to ask for painkillers if you need them.

You will usually spend the night of your operation in hospital. This is to make sure that you are safe and that your pain is well controlled. The nursing staff and physiotherapists will want to be sure that you are safe before you go but this is normally the following day. Note that for the first few days your shoulder may be very sore, even when you are not using it.

Getting moving

Your surgeon will decide at the time of surgery what movements will be safe afterwards. As a general rule **you must not use the repaired tendon for 6 weeks after the operation**. This is very important as the muscles involved are strong and capable of pulling the repair apart.

This means that for 6 weeks from the day of your operation you must not use your muscles to **lift** your arm unless specifically told to by your surgeon. You should use the sling provided at all times during this period, except while exercising. Depending on the size of the tear we may allow other movements, for example turning the arm in or out. The physiotherapists will show you movements that you can and can't do. They will also give advice about exercises to perform. It is important to follow these instructions.

What should I look out for?

It is difficult to predict exactly how long it will take to recover after your operation. The size of the tear, the length of time since the tear happened, the amount of pain you have before the operation and the work you do will all affect the rate at which you recover. Generally, you should become comfortable using your arm below shoulder height within the first 6-8 weeks. By about 12 weeks you would typically be able to use your arm above shoulder height but it will still be weak and may not have a full range of movement. Somewhere between 4 and 6 months most patients would have good use of their arm above shoulder height.

Full recovery can take 6 – 9 months or even longer. The strength of your arm may continue to improve for 12 - 18 months after your operation.

Are there any risks or complications?

As with all procedures, there are risks from having this operation.

Common (Happens in 2-5% of patients)
Pain: The pain from the operation should settle quickly but in some patients this may take longer than expected. Occasionally scars can continue to cause an unpleasant pain, long after the operation. This can be difficult to treat.

Bleeding: There will inevitably be some bleeding but it is usually small during this operation. There may be some leak of blood from your wounds but this should be dealt with on the ward. It is rare to need a blood transfusion after this operation.

Stiffness: Some stiffness that settles with use and physiotherapy is normal after shoulder surgery. Occasionally a very stiff or 'frozen' shoulder develops. It can be painful and may slow your progress after the operation. Extra physiotherapy, injections and sometimes further surgery may be needed to treat this.

Change in biceps shape: Dividing one of the biceps tendons can change the shape of the biceps muscle as explained above. It will only be done if the tendon is significantly damaged.

Re-tear: However well the repair is done the tendon may tear again, perhaps because of a fall during the recovery period or a further injury. If this happened your surgeon would discuss with you whether or not to repair the tendon again.

Less common (Happens in 1-2% of patients)
Infection: This is a serious complication as it prevents the tendon from healing. It may present as redness, oozing, warmth and worsening pain around your shoulder. Further surgery is often necessary to wash the joint out and remove the stitches (sutures) used in the repair. A prolonged course of antibiotics may be necessary. Every step is taken to avoid infection including intravenous antibiotics at the time of surgery, but it can still happen.

It is vital that you tell medical staff if you think you have an infection at any stage.

Rare (Happens to fewer than 1% of patients)
Blood clots: Blood clots are rare after shoulder surgery but can form in the arms or legs. They can cause painful swelling of the limb and rarely, put your life at risk by affecting your lungs. If you are at risk of forming blood clots we will give you medicine to reduce this risk.

Thickened or keloid scar: Some people naturally develop scars which become thickened with time. They can sometimes be helped with surgery or steroid injections.

Fat necrosis: Fat beneath the skin of your wounds can die away, leaving an uneven scar.

Nerve damage: Close to the area of your operation are important nerves that supply your arm and hand. These can be damaged during the surgery. This could cause temporary or sometimes permanent weakness and numbness in the arm or hand.

Fracture: Removing bone from the underside of the acromion does leave it slightly weaker for a while. Rarely in patients with thin bone it could break.

Tendon damage: The tendons around the joint may also be damaged during the operation.

Major bleeding: Extremely rarely a large artery or vein may be damaged. This might need a further operation to stop the bleeding including a large wound over the front of the shoulder.

Risk of a general anaesthetic: The risk to a healthy patient of problems arising from an anaesthetic is very small. However, each year in the UK several healthy people will die or suffer serious heart, lung or brain injury following an anaesthetic. This can be from problems or mistakes made during the anaesthetic or because of patient health problems. We will take every possible step to keep you safe during your operation.

If you would like this leaflet in large print, Braille, audio version or in another language, please contact the General Office on 01872 252690

Patient copy

CONSENT FORM 1
PROCEDURE SPECIFIC PATIENT AGREEMENT

NHS
Royal Cornwall Hospitals
NHS Trust

NHS number: .....
Name of patient: .....
Address: .....
Date of birth: .....
CR number: .....

AFFIX PATIENT LABEL

_____ **side**

Rotator cuff repair

Surgery to repair a torn tendon in the shoulder and address any underlying cause

STATEMENT OF HEALTH PROFESSIONAL (to be filled in by health professional with appropriate knowledge of proposed procedure, as specified in consent policy)

I have explained the procedure to the patient. In particular, I have explained the intended benefits and summarised the risks, as below:

- *We hope to stop most, if not all, of the pain in your shoulder and to improve your function as much as possible*

Significant, unavoidable or frequently occurring risks:

- *Pain, bleeding, stiffness, change in biceps shape, re-tear possibly needing further surgery*

Uncommon but more serious risks:

- *Infection sometimes requiring further surgery, strong IV or long term antibiotics*

Rare but serious risks:

- *Blood clot, nerve damage, fracture, tendon damage, major bleeding, altered wound healing*
- *Anaesthetic risk which includes a very small risk to life or limb from complications such as heart attack and stroke*

Any extra procedures which may become necessary during the procedure:

- *Blood transfusion (rarely necessary)*
- *Other (please specify):*

I have also discussed what the procedure is likely to involve, the benefits and risks of any available alternative treatments (including no treatment) and any particular concerns of this patient.

I have given and discussed the Trust's approved patient information leaflet for this procedure: Rotator cuff repair CHA3239 which forms part of this document.

I am satisfied that this patient has the capacity to consent to the procedure.

This procedure will involve: ☐ General and/or regional anaesthesia ☐ Local anaesthesia ☐ Sedation

Health Professional signature: ..... Date: .....

Name (PRINT): ..... Job title: .....

STATEMENT OF INTERPRETER (where appropriate)

I have interpreted the information above to the patient to the best of my ability and in a way in which I believe he/she can understand.

Interpreter signature: ..... Name (PRINT): ..... Date: .....

affix patient label

Rotator cuff repair consent

STATEMENT OF PATIENT

Please read this form carefully. If your treatment has been planned in advance, you should already have a copy of the patient information leaflet which describes the benefits and risks of the proposed treatment. If not, you will be given a copy now. If you have any further questions, do ask - we are here to help you. You have the right to change your mind at any time, including after you have signed this form.

I agree to the procedure or course of treatment described on this form.

I understand that you cannot give me a guarantee that a particular person will perform the procedure. The person will, however, have appropriate experience.

I understand that I will have the opportunity to discuss the details of anaesthesia with an anaesthetist before the procedure, unless the urgency of my situation prevents this. (This only applies to patients having general or regional anaesthesia).

I understand that any procedure in addition to those described on this form will only be carried out if it is necessary to save my life or to prevent serious harm to my health.

I understand that tissue samples will only be taken in relation to the procedure explained to me. No samples will be taken for quality control, clinical education or research purposes.

I have been told about additional procedures which may become necessary during my treatment. I have listed below any procedures **which I do not wish to be carried out** without further discussion.

.....

I have received a copy of the Consent Form and Patient Information leaflet: Rotator cuff repair CHA3239 which forms part of this document.

Patient signature: ..... Name (PRINT): ..... Date: .....

A **witness** should sign below if this patient is unable to sign but has indicated his or her consent.
Young people / children may also like a parent to sign here (see guidance notes).

Witness signature: ..... Name (PRINT): ..... Date: .....

CONFIRMATION OF CONSENT (to be completed by health professional when the patient is admitted for the procedure, if the patient has signed the form in advance).

On behalf of the team treating the patient, I have confirmed with the patient that they have no further questions and wish the procedure to go ahead.

Health Professional signature: ..... Date: .....

Name (PRINT): ..... Job title: .....

Important notes (tick if applicable):

☐ See advance decision to refuse treatment ☐ Patient has withdrawn consent (ask patient to sign/date here)

Patient signature: ..... Name (PRINT): ..... Date: .....

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Name of patient: .....
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