Nottinghamshire Integrated Care System

Rotator Cuff Tears

Information for Patients

Information in this booklet is intended to be used as a guide. It gives you an idea about how *Rotator Cuff Tears* can be managed. You should remember that every case is different, and symptoms and management can vary from person to person.

Rotator Cuff Tears

The *Rotator Cuff* is a group of tendons that connect four muscles from around your shoulder blade (Scapula) to the bone at the top of your arm (Humerus). These muscles help to keep the ball in the socket as you lift your arm. Functionally the Rotator Cuff lifts and rotates the arm.

These tendons are vulnerable to "wear and tear" over time. This can cause "degenerative" or age-related tear(s) of the *Rotator Cuff.* This can happen with or without trauma; it can be a sudden or gradual onset of symptoms.

The main symptoms of a *Rotator Cuff* tear are pain, weakness and reduced movement. However, many people with *Rotator Cuff* tears do not have any symptoms at all. It is important to remember that even if you have a *Rotator Cuff* tear, this does not always mean that the tear is causing all your pain. Your symptoms may be caused by something else.

Treatment will depend on the size and type of tear, the symptoms and the general condition of your shoulder. Many people with *Rotator Cuff* tears benefit from Physiotherapy to improve the strength and condition of their shoulder. Surgery may be required if it is a traumatic tear (an acute injury) or if conservative (non-surgical) treatment has not helped.

What is a Rotator Cuff Tear?

Your shoulder is a ball and socket joint. The ball sits at the top of the bone of your upper arm. The socket sits on the edge of your shoulder blade.

The Rotator Cuff is a group of tendons that connect four muscles around your shoulder blade to the top of your arm. Before you move your arm, these muscles switch on and create the space needed between the top of the ball & sockets joint and the 'shelf or roof' of the shoulder blade. This allows the muscles to work as you lift and rotate the arm through all its movements.

These tendons can be damaged when you injure your shoulder, such as a fall. However, they also can simply wear out or become weak over time because they are not being used properly. The Rotator Cuff tendons are particularly prone to wear and tear when there is friction or irritation on the bony shelf / roof of the shoulder blade (Acromion). Eventually, this can cause a "degenerative" tear in the Rotator Cuff.

The chances of having a Rotator Cuff tear increases with age. These tears are common in people over 65. Up to 50% of people over 65 have a Rotator Cuff tear, many of which, do not have symptoms.

Diagnosis & Investigations

***Rotator Cuff Tears* can be diagnosed from the signs and symptoms that you describe.**

Assessment of the shoulder, neck and arm by a health care professional will help to inform this diagnosis. Depending on your presentation an X-Ray and/or ultrasound may be indicated to provide additional information to aid the diagnosis and recommend treatment. Investigations only provide information to support the clinical examination.

Ultrasound Scans

An ultrasound scan looks at the 'soft-tissues' around the shoulder such as the muscles, tendons and bursa. It is important to remember that tears can be found on ultrasound scans, but this does not mean the tear(s) are responsible for the symptoms you are experiencing.

X-Rays

An X-Ray looks at the bones of the shoulder, assessing the quality of the joint and the surface of the bones.

Additional Investigations

An MRI scan may be indicated if your presentation is complex, however this is rare. There are no blood tests for Rotator Cuff Tears.

Symptoms

The main symptoms of a *Rotator Cuff Tear* are pain, weakness and reduced movement in the shoulder. Sometimes the pain can spread to the shoulder blade or down into the upper arm.

If the *Rotator Cuff* is torn, the ball may not move as smoothly in the socket. This can cause an irritation and inflammation of the soft tissues around the shoulder joint. This usually causes a short, sharp pain when the arm is put in certain positions, most often when it is above your head or behind your back.

It is important to remember that even if you have a *Rotator Cuff Tear,* this does not always mean that the tear is causing all your pain. Your symptoms may be caused by something else.

Will it get better?

It is unlikely that any tears in the *Rotator Cuff* will heal, particularly if the tendon is worn. However, you don't need the tear surgically repaired for your pain and symptoms to improve. It can settle with conservative (non-surgical) treatment, which can improve the function of your shoulder. This will include exercises, some of which are demonstrated towards the end of this booklet.

It may take between 3-6 months of consistent exercise use to get better, but this is normal.

We work with a team of Orthopaedic Advanced Practitioners and Consultants. If you do not respond to physiotherapy, we can escalate your care, such as considering steroid injections.

Steroid injections are sometimes used to facilitate physiotherapy exercises. They offer a window of opportunity of reduction in symptoms to allow participation of the exercises. Injections are only offered in conjunction with physiotherapy.

Surgery for *Rotator Cuff Tear* is only offered with acute tears within six weeks of the injury or with chronic problems if conservative management has failed. The aim of the operation is to increase the space under the Acromion. If the quality of the tendon is poor (degenerative) then a repair is often not an option, as the surgery is likely to fail.

Management

***Rotator Cuff Tears* are treated with a variety of different management techniques. Treatment will depend on the size and type of tear, the symptoms it causes and the general condition of the shoulder.**

Physiotherapy

Many people with *Rotator Cuff Tears* benefit from exercises to reduce stiffness and improve the strength of the shoulder. This will not help the tendon heal, but it will help the weakness and reduced function caused by the tear. It will also help reduce the chances of you suffering from any inflamation of the tendons or developing a stiff shoulder.

Medication for Pain Control

Controlling your pain allows you to continue to function and helps you cope. Your GP may have already discussed medication to help with your pain and the correct ways to take pain relief. They may recommend that you take it as a short course rather than 'as and when' the pain is bad. This often includes 'non-steroidal anti-inflammatory' medication such as Ibuprofen, Paracetamol or Zapain. Anti-inflammatory gels can also be trialled. Please always read the instructions before using these products.

Management (cont'd)

Surgery

If your symptoms are severe and have not improved with conservative (non-surgical) management, there are some surgical options. These will depend on the overall condition of the rotator cuff and the shoulder joint.

Subacromial Decompression

If there is limited space under the Acromion (the roof of the shoulder blade) a Subacromial Decompression (SAD) may be indicated. The aim of the operation is to increase the space under the Acromion. This is an arthroscopic (keyhole) surgery.

Rotator Cuff Repair

If the tear is acute or the quality of the tissue is good enough the tendon can be repaired with sutures (stiches).

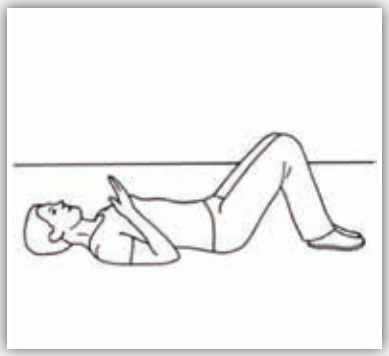
Reverse Shoulder Replacement

If you have an extensive Rotator Cuff Tear, Osteoarthritis of the shoulder joint and severely restricted function, then a joint replacement may be considered. Because the Rotator Cuff is torn, you may need to have a special type of replacement, known as a 'Reverse Total Shoulder Replacement.' This often helps to reduce your pain, but the amount of movement you have in your shoulder afterwards can be quite limited. Your health care professional can give you more advice on this.

EXERCISES

The following exercise programme has been designed for patients with Rotator Cuff Tears. It will help to build up the strength of the muscles around your shoulder, which should improve its function.

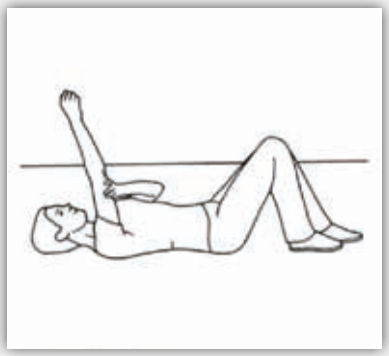
The exercises should be done 2-3 times a day, for at least 12 weeks. Start the exercises lying down to begin with; as strength increases, move to an inclined sitting position, then to full sitting and finally to a standing position.



EXERCISE 1

Arm raises:

- Lying on your back, rest the elbow of your affected arm on a rolled towel
- Bend your elbow as far as possible
- Flex your shoulder to 90 degrees so the elbow points straight up to the ceiling
- Use your other arm to help if needed, but try to make your shoulder muscles work
- Relax and return to the starting position
- Repeat until fatigued, aiming for three minutes.

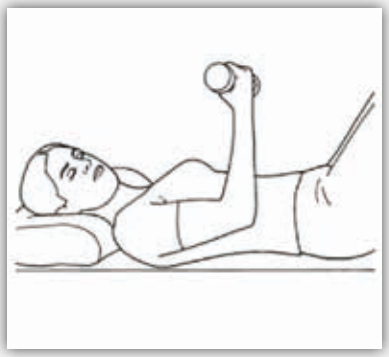


EXERCISE 2

Circles in the air:

- Once your shoulder can reach 90 degrees with your elbow pointing to the ceiling in Exercise 1, try to straighten the elbow and point your finger to the ceiling
- Make circular movements with your index finger, then with your wrist and then your elbow
- Finally, try to make small circles with the whole arm; clockwise and anti-clockwise
- Repeat until fatigued, aiming for three minutes
- To make the exercise harder, increase the size of the circle and/or hold a small weight in your hand (e.g. a tin of beans).

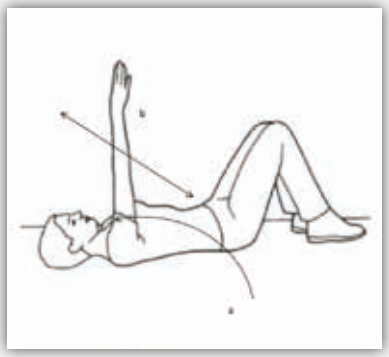
EXERCISES



EXERCISE 3

Punching the air :

- Lying on your back, rest the elbow of your affected arm on a rolled towel
- Bend your elbow into the position shown
- Punch your hand straight up into the air and hold for one second before lowering back to the start position
- Repeat until fatigued, aiming for three minutes
- To make the exercise harder, hold a small weight in your hand (e.g. a tin of beans).



EXERCISE 4

Crosses in the air:

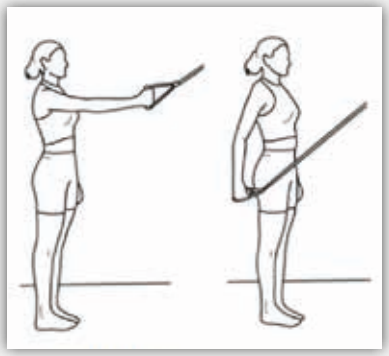
- Once your shoulder can reach 90 degrees with your elbow pointing to the ceiling following Exercise 1, try to straighten your elbow, pointing your finger to the ceiling
- Move your arm up and down in line with your body before returning to the finger pointing position
- Now, move the arm out to the side and then back across your body
- Repeat each exercise until fatigued, aiming for three minutes
- To make the exercise harder, hold a small weight in your hand (e.g. a tin of beans).

EXERCISES

EXERCISE 5

Shoulder rotation with weight:

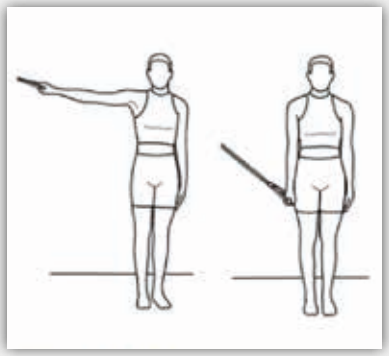
- Stand with your elbow bent and hand in a fist position
- Keeping your elbow by your side, rotate your shoulder so your hand moves out, away from your side
- Hold for one second and then move it back into your body
- Repeat until fatigued, aiming for three minutes
- To make the exercise harder, hold a small weight in your hand (e.g. a tin of beans).



EXERCISE 6

Bell ringing:

- Using an exercise band, tie a know in the band and place the knot over the top of a door
- Close the door to seal the knot on the other side
- With the exercise band hanging down from the top of the door, grasp the end of the band as high up as you can reach with your affected arm
- With a light tension in the band, pull your arm down so your hand is by your side, keeping your elbow straight
- Hold for one second as you check your shoulder posture is square and set well
- Slowly raise your shoulder back up to the start position
- Then, stand side on to the door, perform the same exercise as above but with your arm going out to the side of you
- Repeat each exercise until fatigued, aiming for three minutes.



MSK together
An integrated MSK service for Mid-Nottinghamshire