

ROTATOR CUFF TENDON REPAIR

There are four *rotator cuff tendons* in the shoulder. They are responsible for giving your shoulder strength and stability. Usually through a process of wear-and-tear one or more of these can develop a hole, usually where they insert onto the top of the arm bone (*humerus*). These are often called “tears” of the tendon, but it is rare that it results from an actual injury, and is usually a gradual degenerative process. Upto 30% of people at the age of 60 with pain free shoulders have been incidentally found to have small holes in their tendons, so it is not something that would definitely need surgery.

It may cause shoulder pain, usually over the front, top and side of the shoulder, but can be behind the shoulder or extend down the arm towards the elbow and even the wrist.

It is often associated with tissues just above the ball-and-socket joint becoming pinched and rubbing underneath the top of the shoulder blade (called the *acromion*). This results in painful internal swelling and inflammation.

Treatment initially consists of rest and anti-inflammatory tablets (e.g. Ibuprofen/Nurofen, naproxen, diclofenac, etc). Your GP can give you strong painkillers if needed. If this fails then physiotherapy exercises may be helpful.

The main concern if there is a problem with the rotator cuff is when the hole is so large that it results in actual weakness, or if there is significant associated pain.

Occasionally a steroid (cortisone) injection into the affected area (the subacromial space) is useful if the hole is too small to be worth repairing or there are other reasons why surgery would not be suitable. This is not an injection into the bone or joint or tendon. It may be sore for a few days while it takes full effect, and has a minimal risk of infection or other side effects. Some diabetic patients may find their blood sugars may be affected for a few days and should monitor them carefully. Repeated injections are not advisable.

However, I would not perform the steroid injection in cases where surgery to repair the tendon are considered, as this may reduce the likelihood of the surgery being successful and the tendon healing satisfactorily.

SURGERY

Surgery should be the last resort. I normally perform it as an arthroscopic (keyhole) procedure, usually carried out under general anaesthetic as a day-case procedure so you may return home the same day. Small cuts are made around the shoulder to allow a camera to closely inspect the inside of the shoulder and for instruments to shave away the inflamed tissues and perform the repair of the tendon(s) back to the bone using special stitches and anchors. I also smooth any prominent bone to create more space for the shoulder to move without rubbing.

Sometimes other procedures are combined with this procedure, such as shaving of the end of the collar bone, trimming of degenerate tendons, or clearing inflamed or thickened tissues. These will not impact on your restrictions following surgery.

What to expect after surgery

You will go home in a sling to be worn for 6 weeks. You will be given strong painkillers to take home, please take them regularly for at least a few days. You may have been given a local anaesthetic injection at the time of surgery and your shoulder may become more painful after it wears off so taking painkillers is very important. Sometimes the injection results in temporary numbness or weakness, this is nothing to worry about and will usually wear off by the next day.

You will have a bulky dressing that you can remove yourself 24 hours after surgery; the surgical incisions will be covered by small dressings, and these do not need to be disturbed. They are designed to be waterproof but avoid getting them wet for the first 7 days. If they do get wet in the shower clean them with water and apply a fresh dressing. Be sure to make an

appointment with your GP nurse to have the stitches removed and wounds checked at 10-14 days following surgery. You may shower without any dressings 2 days after the stitches have been removed.

You may remove the sling for hygiene such as washing under the armpits etc, as well as simple swinging (*pendulum*) exercises as soon as pain allows. This prevents excessive stiffness and allows the muscles to regain strength early. You should not drive until at least 6 weeks, and you must feel comfortably in control of the car and be able to make emergency manoeuvres before you can safely drive.

Most people return to light office desk-based duties at around 3 weeks, removing the sling once seated and remembering not to actively lift the arm. Heavy manual work may take 8 weeks or more. Physiotherapists will help you with specific shoulder exercises but you must exercise several times daily at home/work.

Surgery for this condition is very safe, but there are rare risks that you should be aware of. These include infection, stiffness of the shoulder that may take many months to resolve, injuries to nerves or blood vessels resulting in poor hand function, ongoing/recurrent symptoms, and further surgery if your tendon doesn't heal properly. However, these risks are all very small and surgery is usually very successful.

It will take several weeks for the shoulder to settle down after surgery, and most of the recovery will take 3 months, along with intensive post-op physiotherapy, to achieve. The shoulder will continue to improve for a year, and some people report continued improvement for up to 2 years following surgery.