

Extensor tendon repair

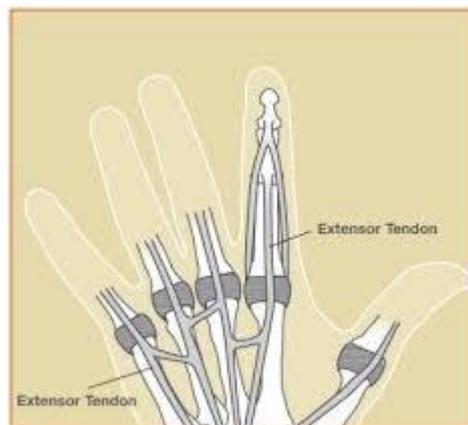
This sheet answers common questions about an extensor tendon repair. If you would like further information, or have any particular worries, please do not hesitate to ask your nurse or doctor.

In all cases, a doctor will explain the operation to you and answer any questions you may have.

In most cases it will be possible for a friend or relative to accompany you for all or part of the operation. Please ask your nurse or doctor.

What are extensor tendons?

Your muscles are responsible for moving your bones and joints. There are important tough bands of tissue that attach the muscles to the bones called tendons. When the muscle tightens it pulls on the tendon which, in turn, pulls on the bone to move it. Extensor tendons connect the muscles in your forearm to your finger and thumb bones and, therefore, allow you to straighten your fingers and thumbs.



What happens if one of my extensor tendons is cut?

If the tendon has been cut it means that when the muscle tightens and pulls on the tendon, the bone no longer moves. You will notice that you are unable to perform certain movements with the finger or thumb that the injured tendon is responsible for moving. It is likely that you will notice pain around the skin cut on your hand when you try to do these movements.

How are extensor tendons repaired?

If the tendon is cut, you will need an operation to repair it. The type of operation will depend on the type of injury and your surgeon will explain which procedure is best for you.

During these operations, surgeons often make the skin cut longer than it was after the injury to allow them to find the two cut ends of the tendon. The tendon and skin are repaired with stitches. Some surgeons use stitches in the skin which dissolve after two to three weeks, whilst other surgeons will use stitches in the skin that will need to be removed after two weeks.

Your hand and forearm will be placed in a plaster of Paris splint (where your wrist and fingers are supported) and a bandage wrapped around your hand and forearm to protect the tendon repair. This is to stop you moving the fingers and potentially pulling the repaired tendon apart again.

Before your procedure

After you have been seen in the clinic you will be advised what operation you are likely to require. Your surgeon will advise you at what time you should last eat and drink before the operation. Most extensor tendon repairs are performed either with you asleep (general anaesthetic) or you awake and your arm asleep (regional anaesthetic). The anaesthetic team will see you on the day of surgery to discuss these two options with you.

After your procedure

You are able to go home on the same day of your operation. After a general anaesthetic, you will need someone to take you home. After a regional anaesthetic, you must not drive yourself home as your hand cannot grip the steering wheel and your insurance company will not cover you, but you can use public transport to travel home.

When at home

You will be provided with painkillers and it is important that you finish the course of antibiotics that were given to you when you first had the injury. When at home, keep the arm elevated above the level of your heart for the next week to reduce swelling and pain. When washing or showering, keep the dressing and plaster of Paris splint dry by covering the affected hand and forearm with a plastic bag taped around the wrist.

Follow-up

After three to five days, you will have an appointment to see the hand therapists who will check the skin wound is healing ok and change your dressings. At this time they will change your heavy plaster of Paris splint for a light-weight plastic splint that will be moulded to fit your forearm and hand.



An example of the plastic splint you will be given

The hand therapists will arrange follow-up appointments over the next three months.

Using the hand

It is very important to perform the exercises given to you and to wear the plastic splint as advised. After the operation the repaired tendon remains very fragile and needs careful rehabilitation until it is strong enough for you to use your hand normally again. Your splint will prevent you from bending your fingers too far or gripping things during this time.

A likely rehabilitation programme is shown below (please note you cannot drive for eight to 12 weeks and you should massage the scar with E45 cream from week four until 12 months after the operation)

- 0-4 weeks: Wear splint at all times.
 Do not use the injured hand.
 Perform finger exercises with hand in the splint.

- 4-8 weeks: Wear splint whilst sleeping or when out of the house.
 Use hand for light activities (eg light switches, handling money, doing up buttons).

- 8-12 weeks Perform finger exercises with the hand out of the splint
 Don't have to wear the splint.
 Use the hand for medium activities (eg holding a pint glass, using tin opener, washing up).
 Continue finger exercises.

- >12 weeks Return to normal activity with hand.
 Continue finger exercises.

Main risks and side effects

Pain

Injuries and operations on the hand can be painful. The local anaesthetic injected at the time of the operation should keep you pain free for four to six hours after the operation. After this make sure you keep your arm elevated and take the painkillers provided.

Bleeding

A small amount of bleeding into the dressing after the operation is normal. In these circumstances, elevate the hand above heart level. Although uncommon, if bleeding persists and the dressing becomes soaked with blood, please return to the Royal Free Hospital's A&E department and inform the staff that you are a patient of the plastic surgery team and we will come to help you.

Infection

At the time of injury, dirt and bugs can get into the cut, which can cause an infection. It is important that the wound is cleaned properly and that you finish the course of the antibiotics we give you to avoid this. The risk of infection is approximately 2% when these measures are taken. If, however, you notice increasing pain, an unpleasant odour or yellow/green fluid coming through the dressing you may still have developed an infection. Please contact the plastic dressing clinic to be seen as soon as possible.

Wound breakdown

The wound can open again after the operation and we may treat this with dressings or, very occasionally, we may need to operate again.

The tendon repair may break

This occurs in less than 5% of cases. When this occurs, it usually happens in the first two weeks after the operation as the tendon is most fragile during this time. You may feel a snap or notice that you are unable to straighten your finger. If this happens, it is important that you contact the hand therapists or the plastic surgery doctors as soon as possible. To minimise this risk you must follow the rehabilitation plan given to you by the hand therapists and avoid any smoking or nicotine replacement therapies during the three-month healing period.

Restricted movement

During movement of fingers and thumbs, the tendons glide under the skin of the hand and wrist. Unfortunately, repaired tendons have a tendency to stick to the surrounding tissue which means that even after a good repair and intense hand therapy, many fingers do not recover their full movement. Sometimes more hand therapy can help but in a few cases, surgery may be needed to release scar tissue around the tendon to achieve a better range of movement.

Cold intolerance

The affected finger/hand may become painfully cold in the winter months. This may settle with time and is best avoided by wearing appropriate clothing to keep the hands warm.

Complex regional pain syndrome

Around 5% of patients may experience complex regional pain syndrome of the affected finger or the whole hand after the injury. This is an unusual reaction to trauma and results in pain, swelling, stiffness and increased sensitivity in the hand and must be treated with special medication and intense therapy.

Do you have any further questions?

If you have any further questions or concerns regarding your injury or operation, you can contact our hand trauma clinic on 0207 794 0500 x 31312.

Other useful contacts:

Day surgery – 0207 794 0500 x 38586

Hand therapy – 0207 317 7703

Plastic surgery dressing clinic – 0207 794 0500 x 31312

If you would like a large print or audio version of this information, please ask a member of staff.

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