

Hand trauma

Tendon repair Information for patients, relatives and carers

What is a tendon?

Tendons are long, thin bands of tissue that connect the muscles in your forearm to the bones in your hand. In your hand, there are several tendons, which allow you to move your fingers and wrist.

Tendon injury

Tendons are usually injured through deep cuts (lacerations) to the hand. However, they can be injured in other ways such over bending or straightening of the finger. A tendon injury can be complete (cut all the way through) or partial (only part of the tendon is cut).

Tendon repair

You can think of tendons like stretched elastic bands. When they are cut, the ends recoil, they don't stay where the cut happened.

Tendon repair usually involves opening the wound to find the two ends of the tendon. Sometimes, we might need to make an incision (cut) to extend the original wound to help find the tendon ends, which we can then repair.

We will repair your tendon using non-dissolving stitches, to help the tendon ends heal together. The aim of the surgery is to allow your fingers to regain movement. If other parts of your hand have also been damaged, such as nerves, we will repair them too.

A complication of tendon repair surgery includes that the tendon repair may break down – a rerupture. A re-rupture of a tendon may happen if you start using your hand too much too soon and is more difficult to treat. It is extremely important to follow the post-operative instructions regarding movement and no weight bearing through the injured arm. If re-rupture of the tendon occurs, further surgery may be needed.

How soon will my surgery be?

We will usually be able to do your surgery within four days of when you first come to the hospital. It is safe to do the surgery up to two weeks after your injury happens, although waiting longer than this may require a more complex operation.

Tendon repair surgery is an urgent surgery, which means we can book your surgery in quickly. This also means that the time or day of your surgery might be changed at short notice if there is another more urgent emergency surgery.

Will I need to be asleep for the surgery?

Whether you need to be asleep (general anaesthetic) or have your whole arm numbed (regional anaesthetic) for the operation depends on where in your hand your injury is, and will be decided with the surgical team on an individual basis. If you don't need to be asleep or have your whole arm numb, we will use local anaesthetic (numbing injections) to numb the area so you don't feel pain during the surgery.

You might be:

- awake with an injection to numb the area (local anaesthetic)
- awake with an injection in your armpit or around your collar bone to numb your whole arm (regional anaesthetic)
- asleep (general anaesthetic)

As a team we (surgeons and anaesthetic doctors) will discuss with you which type of anaesthetics are suitable. This is based on several factors including the duration of your operation, your general health, whether you have someone to take you home and look after you on the day of surgery, and your preferences. We will make a decision together with you about which type of anaesthetic you will have.

How to prepare for your surgery

Fasting before arriving at St Mary's Hospital

If your procedure is going to be done while you're awake (under local anaesthetic), you don't need to fast before your surgery.

If your procedure is going to be done under general or regional anaesthetic (while you're asleep or your whole arm is numb) you will need to fast before your procedure.

Please make sure you:

- do not eat anything after 2 am on the morning of your surgery (only plain water after this time)
- do not drink anything after 6 am on the morning of your surgery, except for a small sip of water to take any regular tablets
- do not have any chewing gum after 6 am on the morning of your surgery

Fasting before your surgery improves the safety of general anaesthetic, if you do not follow these rules, your procedure is likely to be delayed or moved to another day.

If you take regular medications, our team will advise if you need to stop them before your surgery. If you're not sure, please ask us.

On the day

Arriving for your operation

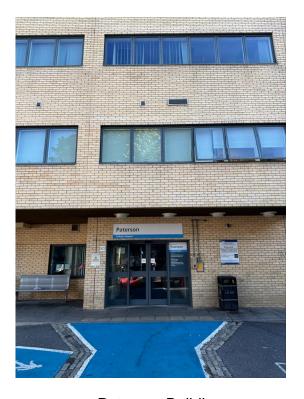
Day surgery:

Adults – We will ring you the day before your surgery. Please follow the instructions we give you in this phone call about where to go. Usually this is either the Surgical Admissions Lounge on level 4 in the QEQM building or Theatres on level 4 in the Paterson building at St Mary's Hospital.

Children – Please go to the children's ward (usually this will be either Great Western Ward or Westway Ward). Normally we will call to confirm where to go the day before surgery. It will be on level 6 in the QEQM building.



West Way and Great Western Wards – Level 6 QEQM



Paterson Building



Theatres Admissions Lounge on Level 4 of QEQM



Queen Elizabeth the Queen Mother (QEQM) Building

If you are coming for your procedure as a day case (you're not staying overnight at the hospital), please make sure you arrive on time. Usually, we will ask you to arrive at 7.30am, but sometimes we might ask you to arrive later, if your surgery is in the afternoon. Please note if your surgery is planned to be in the afternoon, we will give you different fasting instructions.

The surgical team who will be performing the procedure will come to see you and confirm the procedure and consent you for the procedure. We will explain why the operation is important, the risks of the surgery, alternatives to surgery including no surgery, and answer any questions you have about the operation.

As mentioned above, tendon repair surgery is an emergency surgery, which means we can book your surgery in quickly, but this does mean that if there is another urgent procedure we might have to change the timing of your surgery. Please be patient with our team while awaiting surgery. It is a good idea to bring something to do (e.g. a book to read) while you're waiting.

Before your surgery

On the ward, you will change into a hospital gown, and the nurse will take you to the operating theatre where the procedure will happen when we are ready for you. Children and adults with cognitive difficulties can take a relative, carer or friend with them to the operating theatre for their anaesthetic, however the accompanying person will not be able to stay for the operation. They will however be able to meet them once the operation is finished in the recovery area.

If you are having a regional or general anaesthetic we will give this to you in the anaesthetic room, and then take you into the operating room. The anaesthetic doctor will give you the medications either as an injection or for you to breath in if you're going to sleep. The

anaesthetic doctor will explain more about this. If you are having a general anaesthetic you will wake up after your procedure in the recovery room.

If you are having a local anaesthetic, we will take you directly into the operating room, where you will lie down on the operating bed with your arm placed on a table, then the surgeon will give you the numbing injections (local anaesthetic).

For both approaches, we will ask you to confirm your name, date of birth, and the procedure you are having before giving you the anaesthetic.

After your surgery

If you have had a general anaesthetic, the surgical team will come to see you on the ward to explain how the procedure went. You will need someone to collect you from the hospital after the procedure. This can be a family member, partner, or friend. You will need someone to stay with you for the first night after the operation. This is in case there are any problems that mean you need to come back to the hospital, such as bleeding or pain that is not controlled with painkillers. If you do not have someone to collect you and stay with you, you will need to stay in hospital overnight.

If you are having a local anaesthetic, the team will explain how the procedure went while you are in the operating theatre, and you don't need someone to collect you or stay with you for the first night after the operation, however you cannot drive yourself home and we advise you not to take public transport home.

Once you are safe to be discharged, we will give you instructions for your follow-up appointment before you leave. Usually, this will be one week after your procedure in the plastics dressings clinic (PDC) and the hand therapy clinic. We will give you instructions on how to look after your hand until your follow up appointment. You will need to complete one week of antibiotic tablets.

Recovery

Will I need a splint after my surgery?

After the operation the surgical team will include a Plaster of Paris splint in your dressings to prevent movements that may place the tendon repair at risk of re-rupture. The hand therapy team will replace this with a lighter thermoplastic splint within one week of your surgery. The position of your splint will depend on which tendon is injured.

It is important that you do not remove the cast yourself until you are seen by the hand therapy team as this risks damaging your repaired tendon. If it is uncomfortable or broken please contact us for advice urgently (please see useful contacts section).

You will need to wear a splint for at least six weeks to protect the repaired tendon from too much movement or being stretched. Your tendon will be weak at first after the repair and wearing a splint helps to protect your tendons from re-rupturing.

When will my hand function return to normal?

It takes 12 to 14 weeks for the healing tendon to return to its full strength. Your hand therapist will closely supervise and guide you through the different stages of recovery, and tell you what you can and can't do with your hand.

The first three weeks are particularly important for your hand function returning. There is a chance that your hand might not completely return to how it was before and you might have some stiffness long term.

You will be given specific safe exercises to start doing while wearing your splint at your first hand therapy appointment. This helps stop stiffness, reduces swelling, encourages tendon healing, and improves movement. If you follow the instructions given by the hand therapists, there is good potential for your hand function returning to normal.

How long will I need to see the hand therapy team for after my surgery?

You will see the hand therapist team within a week after your operation. The hand therapy team will continue to see you until you have regained a good level of function in your hand. How long you see them for will depend on your injury and your recovery.

How much time will I need to rest from work/school after my surgery?

This depends on what your job is and if you can make adjustments to it while you're recovering.

School – you can go back to school the next day with a protective dressing. You'll need to talk to your school because you'll need to stop sports, musical instruments and other practical activities for at least four weeks.

Desk work – you can return to work the following day. You will need adjustments for at least 12 weeks, including not using the injured hand for manual tasks. You won't be able to use your injured hand at all for the first four to six weeks. Then you can use it for very light use only, such as typing, up to 12 to 14 weeks – your hand therapist will guide you about which activities you can and can't do.

Manual work – you can return to work the following day with modified duties and a protective dressing/splint. You will not be able to use your injured hand at all for the first four to six weeks, and then you can only use it for very light use until week 12 to 14. Your hand therapist will guide you about which tasks you can and can't do. It takes 12 to 14 weeks for the tendon to return to full strength, so you will need changes to your work for 12 to 14 weeks in total.

We can give you statement of fitness for work (fit note) for your employer if you need one

When can I return to normal activities/hobbies?

You will be wearing a splint on your hand for six to eight weeks. You will not be able to use your hand for any activity for the first four weeks, as your tendon will not be strong enough.

This is an approximate timeline of when you can return to certain activities:

- typing six to eight weeks
- writing six to eight weeks

- driving eight to ten weeks
- manual work and cycling 10 to 12 weeks
- contact sports 12 weeks

Please discuss specific activities with your hand therapist, as every injury and person is treated as an individual.

Is there anything I can do to improve the healing and recovery process?

- do not use your injured hand for the first four weeks after surgery
- keep your hand elevated (raised up) to reduce swelling we will give you a sling for this
- follow the hand therapist's instructions on how to move your hand to prevent stiffness and use painkillers if you need them.
- do not smoke or vape nicotine makes it harder for your body to heal!

Useful contact details

Plastics dressings clinic team: imperial.smhplasticscns@nhs.net

Contact phone number: 07833725706

Hand therapy team: imperial.handtherapyimperial@nhs.net

These email inboxes and this phone number are monitored Monday to Friday 9am to 5pm, and one of our team will reply to you as soon as possible.

For any emergency concerns (for example infection or unmanageable pain): Please go to St Mary's A&E where you will be assessed by the on-call plastic surgery team. Or call 111, speak to your GP or local A&E.

How do I make a comment about my visit?

We aim to provide the best possible service and staff will be happy to answer any of the questions you may have. If you have any **suggestions** or **comments** about your visit, please either speak to a member of staff or contact the patient advice and liaison service (**PALS**) on **020 3312 7777** (10.00 – 16.00, Monday to Friday). You can also email PALS at imperial.pals@nhs.net The PALS team will listen to your concerns, suggestions or queries and is often able to help solve problems on your behalf.

Alternatively, you may wish to complain by contacting our complaints department:

Complaints department, fourth floor, Salton House, St Mary's Hospital, Praed Street London W2 1NY

Email: ICHC-tr.Complaints@nhs.net

Telephone: 020 3312 1337 / 1349

Alternative formats

This leaflet can be provided on request in large print or easy read, as a sound recording, in Braille or in alternative languages. Please email the communications team: imperial.communications@nhs.net

Wi-fi

Wi-fi is available at our Trust. For more information visit our website: www.imperial.nhs.uk

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