



SURGERY

Thumb base Ligament Reconstruction

What does this involve?

This surgery involves replacing, or reinforcing, one of the main ligaments that stops the thumb base slipping out of position.

There are many small ligaments around the bottom of the thumb that usually work to keep the thumb metacarpal well lined up with the trapezium while you use your thumb (see pictures below). If these ligaments are torn, damaged or stretched out the thumb base becomes less well lined up. This can lead to a feeling of instability at the bottom of the joint when using the thumb and/or pain around the bottom of the thumb.

Often this happens in association with arthritis of the badly lined up joint but occasionally this can be picked up before the joint has started to wear out.

This operation is designed to try and get the thumb base joints to line up properly again so reducing your symptoms. If the joints at the bottom of your thumb have not started to wear out it is also thought that this operation might reduce the risk of the joints wearing out later on, or at least slow down the start of such arthritis.

When is surgery needed?

This operation is performed to relieve symptoms of instability, or pain, in the joint at the bottom of your thumb. Sometimes this procedure is done in combination with another operation at the base of your thumb (eg trapeziumectomy). Your surgeon will discuss this in more detail with you.

Quite often painkillers, supportive splints and strengthening exercises will be enough to relieve thumb base symptoms and these are usually tried before an operation is considered.

Which operation is the right one for me?

There are several ways to replace or reinforce weak thumb base ligaments.

One way is to use part of a tendon to support the thumb base. This is called an 'Eaton-Littler' reconstruction.

Another option is to use strong stitches to support the thumb base. This is called a 'Tightrope' procedure. The stitches go through two metal 'buttons'. An xray of a 'Tightrope' procedure is shown below.

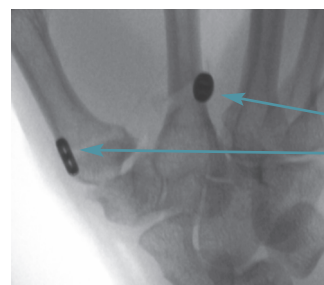
There are advantages and disadvantages to each option and your surgeon will discuss these in more detail with you in clinic prior to you deciding which you would prefer.

Normal Thumb Base Joints



- ← Thumb metacarpal
- ← Normal Joint at base of thumb
- ← Trapezium bone
- ← STT joint

Tightrope in position



- ← Metal buttons holding ends of tightrope against bones.

Type of Operation	Day case
Length of Procedure	1 hour
Anaesthesia	Regional Anaesthetic (whole arm numb) or General Anaesthetic (asleep)



What are the main risks of this operation?

Swelling, Stiffness and Scar pain

This can be reduced by keeping the arm elevated and moving all the free joints as soon as possible. In most people the general swelling reduces dramatically in the first week after the operation.

Local swelling around the surgical site can persist for several months. Local swelling can be helped by massaging the tissues and this may also improve any irritability in the surgical scar.

Occasionally patients are troubled by more swelling and stiffness than average. In this case complex regional pain syndrome (CRPS) is sometimes the cause (see relevant information sheet in 'Conditions we Treat'). Severe CRPS occurs in less than 1% of cases.

Infection

This is unusual in the hand (less than 1% of cases). Local wound infections can often be treated with oral antibiotics. Rare, deep seated infections may require re-admission to hospital, antibiotics into the vein and occasionally more surgery.

Nerve Damage

The nerves most at risk with these operations are the small branches supplying skin sensation on the back of the thumb and index fingers. The lost patch of skin sensation from these injuries might be irritating but should not affect how your hand works.

Worsening of Carpal Tunnel Syndrome

Patients with evidence of carpal tunnel syndrome before thumb base surgery may find that these symptoms are much worse around the time of the operation, probably because of increased swelling in the area. Many surgeons would, therefore, consider decompressing the carpal tunnel at the same time as the thumb base surgery if you already have some signs of carpal tunnel syndrome.

Residual/Recurrent thumb base discomfort

Some patients will still have some discomfort at the base of the thumb after these operations or symptoms gradually recur over time. In most cases the symptoms are much improved though and the residual discomfort is a nuisance only. Occasionally the symptoms are so marked as to require further surgery.

Post Operative Course

Day 1 – 14

- A dressing and padded bandage with a plaster is applied after the operation
- Keep the dressings clean and dry
- Keep the arm elevated in a sling or on pillows to reduce swelling
- Start moving all the joints that are not immobilised as soon as possible to prevent stiffness
- Take painkillers before the anaesthetic wears off and as necessary thereafter

2 – 3 weeks

- An appointment will be made for you to see the hand therapy team
- They will check your wound and make you a removable splint and start further rehabilitation.

3 Months

- By this stage most people will have returned to most activities.
- Hand therapy will continue if needed.

Plaster Cast Information

Contact your surgical centre if:

- Your fingers become blue, swollen or numb and tingling with a plaster cast in place
- You see any discharge, wetness or detect any unpleasant smells from around your cast
- The cast becomes cracked, soft, loose or uncomfortable.

Outside normal working hours you may need to attend your local Accident and Emergency Department for help with these issues.

Driving

You may drive when you feel confident to control the car, even in an emergency. For this surgery it can be up to two months before many people feel this confident. The Hand Therapy team will discuss this with you in more detail.

You should discuss it with your insurer if you are considering driving with a splint in place.

Time off Work

This will vary depending on the nature of your job.

Sick notes can be provided on the day of your operation, at your clinic visits and by your own GP.