SURGERY Trapeziumectomy

SURGERY

Trapeziumectomy

What does this involve?

This surgery involves removing the trapezium bone at the bottom of the thumb. This often is arthritic all around so removing one bone deals with arthritis pain in all the joints around that bone (see picture below).

After the bone is removed the soft tissues around the joint are repaired and tightened up to help keep the thumb well lined up. The position of the thumb is further supported after the operation by a bandage with a plaster support incorporated. This is pushed slightly as the plaster sets to keep the thumb in a good position. As the swelling comes down this is changed to a similarly moulded light-weight plaster cast. During the time in plaster the space where the trapezium was fills in with scar tissue which later acts as a soft pad for the thumb to work against.

After you come out of plaster the thumb and wrist are stiff and you then need to work hard for a few weeks to regain flexibility of those joints. The Hand Therapy team help you with this.

When is surgery needed?

This operation is performed to relieve pain in the arthritic joints at the bottom of your thumb. Most surgeons would encourage you to try painkillers, splints, activity modification, aids to help with certain tasks (opening jars etc) and steroid injections into the painful joint before recommending surgery. The majority of patients with thumb base arthritis can manage their symptoms in this way without ever needing an operation.

Which operation is the right one for me?

There are many variations on this operation but in fact the simplest operation has the fewest complications and usually gives the same function of the thumb in the end as more involved procedures. It is for this reason that a simple trapeziumectomy is considered to be the 'gold-standard' procedure for arthritis at the base of the thumb by many surgeons.

Alternatives to just removing the trapezium include replacing the thumb base joint (see 'Thumb Base Replacement Joint') or fusing the trapezium to the base of the thumb metacarpal (see 'Hand Joint Fusions').

If the tissue around the base of the thumb is very lax a trapeziumectomy may be combined with a procedure to provide extra support to the thumb metacarpal base after the trapezium is removed. This can be achieved using part of a tendon from the front of your wrist or by using heavy stitches from the thumb to the index finger bases (see 'Thumb Base Ligament Reconstruction').

Your surgeon will discuss these options with you in clinic prior to you deciding which you would prefer.

Arthritic Thumb Base



Thumb metacarpal

Arthritic joint at base of thumb

Remains of Trapezium bone – flattened

Arthritic joint also below Trapezium

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 thumb base discomfort

No operation for thumb base arthritis is perfect. Some patients will still have some discomfort at the base of the thumb with any of the operations described above. In most cases the pre-operative pain is much reduced and the residual symptoms are a manageable nuisance only. Occasionally the symptoms are so marked as to require further surgery.

Reduced pinch grip strength (thumb to index finger)

This is likely to be less than in a normal thumb after these operations but more than before the operation, when the joint was very painful. If your job or hobbies need you to put very heavy loads through your thumb a different operation might be better for you. You should discuss this with your surgeon in clinic.

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 loo

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.