

Thumb Base Arthritis

What is Thumb Base Arthritis?

- It occurs when the cartilage at the base of the thumbs wears out.
- Eventually ‘bone on bone’ articulation occurs and bone spurs develop.
- It is more common in females
- and runs in families

How does it present?

- There is usually some prominence at the base of the thumb
- The areas aches, especially when a pinch grip is exerted.
- A ‘thumb in palm’ deformity (also called an adduction contracture) can develop

What can be done?

- Avoid activities that hurt and find other ways to do them
- Take simple pain relief (such as paracetamol) and consider taking an anti-inflammatory.
- Braces can help for pain and still allow reasonable function.
- A steroid injection into the worn joint can sometime relieve pain for extended periods

When is surgery needed?

- When non operative treatment is unsuccessful and
- pain and weakness in the hand:
- stop you from doing the ‘things that you have to do’ such as getting dressed, making a meal, driving a car, or getting a good night’s sleep
- and/or the ‘things that you love to do’ in life such as fishing, riding a bicycle, or holding a book to read.

How does surgery work?

- This kind of surgery usually requires a General anaesthetic (being 'completely knocked out')
- Because it can be quite sore immediately after surgery and because there is a small risk of severe swelling that cuts off blood supply (compartment syndrome) - It is recommended to stay in hospital overnight
- Antibiotics is usually administered at the time of surgery, but does not have to be continued after surgery.

What do we do in surgery?

- There are many different surgeries for thumb base arthritis.
- The technique that I use requires 3 small incisions as drawn in the photos
- During surgery the trapezium bone is removed.
- Half or all of the FCR tendon (marked by the dotted line) is then harvested via a small incision in the forearm
- The harvested tendon is then used to stabilise the thumb.

After the Surgery

In Hospital

- The hand is placed in a plaster
- It is important that the hand remains elevated 'higher than your heart' to help limit swelling
- Do not hesitate to ask for pain killers. It is much better to 'stay on top of pain', than 'to catch' up when it is severe.
- If the plaster feels too tight, ask to have the bandages cut and even remove the plaster if pain from a tight cast is severe.
- It is usual to leave hospital the morning after surgery

At Home

- Continue to elevate your arm until swelling in your fingers subsides.
- Move your fingers (making a full fist and straightening your fingers out fully about 10-20 times a day).
- Keep the wound dry covered and clean.
- Make an appointment with a hand therapist (within a week or 2), to have the cast replaced with a thermoplastic splint.

- An appointment with hand therapy and your surgeon is usually arranged for about 2 weeks after surgery.
- Please do not drive before speaking to hand therapy or a doctor.

The recovery

- A **splint** is usually worn full time for about 6 weeks
- From 2-3 weeks on, a hand therapist will show you how to remove the splint for short periods to do gentle **range of motion exercises**.
- From 6-12 weeks splint wear can be weaned **hand use increased**
- Most moderately heavy activities can usually be achieved by **3-4 months**, but scarring around the base of the thumb can take **6 -9months** to become completely comfortable

Time frames

- **Self care** (washing, dressing, eating) with the operated hand – usually around 2 weeks (a splint is still needed)
- **Driving**: when you are able to control a steering wheel with your operated hand and you are not taking strong pain relief anymore (usually 4-8 weeks post surgery)
- **Golf, fishing, cycling etc.:** usually around 3-4 months, but it can be longer (6 months)

What can go wrong?

- **Infection** occurs rarely (1% of the time), but can be severe. It may need further operations, weeks in hospital. It can lead to a poor outcome.
- There may be **ongoing pain** from other worn out joints in the area, that were not obviously a problem at the time of doing the surgery.
- It is common to have a bit of **numbness next to the scar**. Sometimes the scar can be very sensitive for a long time due to damage to small skin nerves.
- **Very rarely** (around one in a thousand) a severe pain reaction, (CRPS) can develop, which can be disabling for years.
- **Rarely**, the reconstruction can fail, causing ongoing instability and pain at the base of the thumb. This may need further surgery
- A **general anaesthetic** can have complications, such as nausea, heart and lung problems. Please discuss it with your anaesthetist before the operation.

What can you expect the final outcome to be?

- Trapeziectomy with a ligament reconstruction has a high success rate and **most patients are very happy.**
- **Pain** is usually significantly improved, if not cured completely
- **Mobility** in the thumb is usually improved compared to before the operation.
- **Strength** in the thumb **stays at about the same** level as it was before the operation