

Finger joint arthritis (PIPJ arthritis)

What is finger arthritis?

- It occurs when the cartilage in the finger joint wears out.
- Eventually 'bone on bone' articulation occurs and bone spurs develop.

How does it present?

- The joints become larger.
- The joints commonly ache and swell.
- The fingers become stiff, especially after a period of rest. Often it is difficult to make a full fist.

Why does it happen?

- Osteo arthritis is mostly genetic (runs in families)
- Injuries that cause instability or breaks that result in a step in the joint surfaces both can cause arthritis in the long-term
- Inflammatory conditions such as rheumatoid arthritis, psoriatic arthritis etc. can also result in worn out joints.

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.
- A steroid injection into the worn joint can sometime relieve pain from acute flare ups.

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, crafting, or holding a book to read.

How does surgery work?

- This kind of surgery can be done under local anaesthetic (numbing the finger only) in hospital.
- The anaesthetist usually administers sedation (a 'twilight anaesthetic')
- Antibiotics is usually administered at the time of surgery but does not have to be continued after surgery.
- It is common to go home within a few hours of the surgery (day surgery)

What do we do in surgery?

- The operation is done through a curved incision on the back of the finger.
- The worn out joint surfaces and bone spurs are removed
- The surfaces are replaced with a metal and plastic (polyethylene) prosthesis.

After the Surgery

In Hospital

- The finger is placed in a plaster or thick bandage.
- 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 dressing feels to tight, ask to have the bandages cut and even remove the plaster if pain form a tight cast is severe.
- It is usual to leave hospital the same day as the surgery.

At Home

- Continue to elevate your arm until swelling in your fingers subside.
- Keep the wound dry, covered and clean.
- Make an appointment with a hand therapist (within a 3-5 days)
- A combined 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 used for about 6 weeks
- A hand therapist will show you how to do **gentle range of motion exercises** with the help of a splint in this time.
- Most moderately heavy activities can usually be achieved by **3-4 months**, but scarring around the finger 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.
- Damage to the **nerves or blood vessels** to the fingers can (rarely) occur. It can lead to numbress and ongoing pain.
- Severe scarring and stiffness can occur leading to a very stiff finger.
- The joint can become **unstable**, it can **wear out**, become **loose** and the bone around the implant can **break**.
- Repair of the **tendon** that straightens the finger (which is a routine part of the surgery) can fail, resulting in a finger that does not straighten out completely.
- The complications mentioned above are rare, but may necessitate revision surgery, fusion of the joint, or (in extreme cases) amputation of the finger.

- Very rarely (around one in a thousand) a severe pain reaction(CRPS) can develop, which can be disabling for years.
- An **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?

- Finger joint replacement has a high success rate and most patients are very happy.
- **Pain** is usually significantly improved, if not cured completely
- **Mobility** in the finger is usually improved compared to before the operation, although it will not be normal.
- The joints replacements are usually expected to last at least 10 years.