

Distal Interphalangeal Joint (DIPJ) Arthritis

What is DIPJ arthritis?

- The cartilage in the joint at the end of a finger becomes damaged
- It eventually can result in ‘bone on bone in the joint’
- Bone spurs can form around the joint as a result of the arthritis
- The finger can become gradually more bent over time

What causes a DIPJ arthritis?

- Osteo arthritis is a common cause – it naturally occurs as a part of normal aging, but in some people, it happens at a younger age. This often runs in families
- An injury, heavy use, or infection can cause more rapid wear of the cartilage.
- Inflammatory conditions such as Psoriatic arthritis or Rheumatoid arthritis can cause destruction of the joint cartilage.

How does it present?

- The joint becomes more painful and stiff over time
- It becomes larger because of inflammation and bone spur formation.
- The joint can become bent sideways over time (as in the picture)
- Pain in the joint often fluctuates depending on how heavily it is used

What can be done?

- Avoid activities that aggravate the joint

- Take simple pain relief when the joint flares up (paracetamol and/or an anti-inflammatory such as Ibuprofen)
- Taping the joint or wearing a splint can relieve pain when the joint flares up.
- A steroid injection can often give significant relief.

When is surgery considered?

- If there is constant pain or discomfort
- Non-operative treatments have been exhausted.
- If pain in the finger
 - Stops you doing the 'things you have to do' and/or
 - The 'things you love to do' in life
- If appearance is unacceptable, surgery is an option, but the risks must be carefully considered.

How does surgery work?

- This surgery is usually done under local anaesthetic
- The anaesthetist commonly gives some sedation (a twilight anaesthetic) and a dose of antibiotics
- It is done as a day case in a hospital
 - but you cannot drive home after the procedure
 - and you should not be home alone on the night of your surgery

What do we do in surgery?

- A skin incision is made directly over the joint
- The remaining cartilage is removed from the joint
- Some of the bone spurs around the joint are removed
- A screw is inserted through a small incision at the fingertip. The screw is completely inside the bone once inserted.
- The two bones at the tip of the finger is turned into one bone (fused).
- The wound is closed. A dressing and bandage are applied.

After the Surgery

In Hospital

- A bandage is applied to the hand.
- It is important that the hand remains elevated 'higher than your heart' to help limit swelling

- If the bandage feels too tight, do not hesitate to remove it.
- It is usual to leave hospital 2-3 hrs after surgery

At Home

- Continue to elevate your arm until swelling in your fingers subside.
- Move your fingers (making a full fist and straightening your fingers out fully about 10-20 times a day). Except of course for the joint that has been fused.
- Keep the wound dry covered and clean.
- If it is not uncomfortable, leave the bandage in place until your first appointment after surgery
- Blood thinning medication (if you are on any) can be started 2 days after surgery
- An appointment usually arranged with my practice nurse at about 1-2 weeks after surgery.

The recovery

- The wound usually heals over 1-2 weeks and any sutures are then removed
- Self care (washing, dressing, eating) with the operated hand – usually around 5 days
- Driving: when you are able to control a steering wheel with your operated hand and you are not taking strong pain relief anymore (usually 5-10 days post surgery)
- It usually takes around 6 – 8 weeks for the bones to fuse. Pinch grip with the operated finger must be avoided in this time.
- Most moderate activities(equivalent to lifting a pot of the stove or pouring a full kettle) can usually be achieved by 6-8 weeks,
- It can take 3-6 months for sensitivity and deep scarring in the site of the operation to resolve.
- Golf, fishing, cycling etc.: usually around 6-12 weeks, but it can be longer.

What can go wrong?

- Infection - may need antibiotics and occasionally further surgery.
- It very occasionally happens that the bones do not fuse and that further surgery is needed.
- The fingertip can appear slightly ‘twisted’. We try very hard to get this right in surgery but is hard to get perfect.

- It is common to have a bit of numbness next to the scar. Sometimes the scar can be sensitive for a long time due to unavoidable damage to small skin nerves
- Rarely, damage to the nail can occur due to the surgery or screw insertion. It can result in a permanent groove in the nail, the nail falling off or lifting away from the fingertip.
- 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?

- The joint at the tip of the finger is permanently stiff
- Pain from the worn-out joint is usually completely resolved
- Good pinch strength is usually recovered
- The finger is usually a lot straighter.