

# De Quervain's Tenosynovitis

## What is De Quervain's tenosynovitis?

- Thumb movements are powered by muscles in the forearm. The Muscles are connected to the fingers by tendons.
- To stop the tendons from 'bow stringing' with wrist and finger movement, there is a tunnel formed by bone and ligaments at the wrist.
- If there is swelling around a tendon, the tendon becomes thicker, or the tunnel narrower – the tendon cannot glide freely through its tunnel.
- The area becomes inflamed and painful, especially with thumb movement

## What causes De Quervain's tenosynovitis?

- The most common cause is over use, that causes inflammation. Excessive use of scissors is an example.
- Some people are prone to swelling and inflammation (synovitis) around their tendons. For example those with rheumatoid arthritis.
- An injury such as a wrist fracture or a direct blow to the side of the wrist.
- There can be a structural predisposition, such as unusually shaped tendons.

## How does it present?

- It usually starts with tenderness on the wrist at the base of the thumb, that is aggravated by movement of the thumb.
- In severe cases there can be crepitus (clicking and grinding) on thumb and wrist movement.

## How does it present?

- Avoid activities that cause pain in the finger. (Gripping, pinching, using scissors etc.)

- Wearing a splint that stops the thumb from moving (it is usually fitted by a hand therapist).
- Consider taking an anti inflammatory.
- A steroid injection around the tendon can resolve the issue, or at least give relief for a while.

### **What can be done?**

- Avoid activities that cause pain in the finger. (Gripping, pinching, using scissors etc.)
- Wearing a splint that stops the thumb from moving (it is usually fitted by a hand therapist).
- Consider taking an anti inflammatory.
- A steroid injection around the tendon can resolve the issue, or at least give relief for a while.

### **When is surgery needed?**

- When non operative treatments (mentioned in the previous slide) is unsuccessful.
- Surgery is usually the best option if De Quervains Tenosynovitis has been present for a long time
- If you would prefer a definitive cure for the problem.

### **How does surgery work?**

- This kind of surgery is usually done under local anaesthetic with or without sedation ('twilight anaesthetic')
- It is done as day case surgery in a hospital,
  - but you cannot drive after the procedure and
  - you should not be home alone on the night of the surgery.
- Antibiotics are usually not necessary at the time of surgery.

### **What do we do in surgery?**

- The operation is done by a small incision on the side of the wrist.
- The sheath around the tendon is released so that the tendon can glide freely
- The wound is sutured and a dressing is applied.

### **After the Surgery**

#### **In Hospital**

- There will be a bandage on the wrist.

- It is important that the hand remains elevated 'higher than your heart' to help limit swelling
- Usually the area is still numb from local anaesthetic.
- It is usual to leave hospital an hour or two after surgery

### **At Home**

- It is usual for the hand to feel numb for about one day after surgery, due to the local anaesthetic.
- Continue to elevate your arm until swelling in your wrist and fingers subside.
- Please keep the bandage on the wrist in place until your first review at my rooms.
- Move your thumb (touching the little finger and straightening it out fully about 10-20 times a day).
- An appointment usually arranged at 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)
- Most moderate activities (equivalent to lifting a pot of the stove or pouring a full kettle) can usually be tolerated by 4-6 weeks,
- Scarring at the site of the surgery, where the tendon sheath was divided can be slightly thick and tender for months (3-6).
- Golf, fishing, cycling etc.: usually around 2-3 months, but it can be longer (6 months)

### **What can go wrong?**

- Occasionally there can be damage to a skin nerve, resulting in tingling, numbness and sensitivity at the scar and on the back of the hand.
- Infection occurs rarely (1% of the time). It is rarely severe.
- There may be ongoing pain from scarring, or other worn out joints in the area such as the joints at the base of the thumb
- Sometimes the scar can be very sensitive and thick, limiting thumb and wrist movement.

- Very rarely (around one in a thousand) a severe pain reaction, (CRPS) can develop, which can be disabling for years.
- Rarely, the released tendons can become unstable and slip backwards and forwards over the side of the wrist as it moves.
- A second tendon running in its own tunnel can be missed during surgery and can cause ongoing problems

**What can you expect the final outcome to be?**

A full recovery is usually expected from a De Quervains release.