

Physiotherapy Department

DeQuervain's tenosynovitis – inflammation of the tendons of the thumb

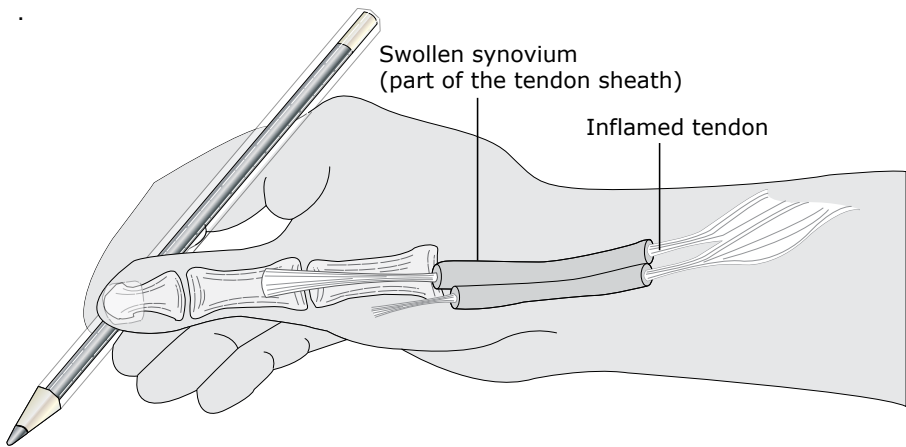
Information for patients



DeQuervain's tenosynovitis is inflammation of the sheath (the synovium). This surrounds the two tendons that are involved in moving the thumb. The tendons run between the wrist and the thumb. There may be swelling and thickening of the sheath and it becomes very painful to move the thumb.

The cause of tenosynovitis

In many cases the cause is unknown. It is more common in women, particularly after pregnancy. Overuse of the tendon, particularly repetitive movements used at work or in a sport, are likely to make the pain and inflammation worse. It can also be brought on by a simple strain.



What are the symptoms?

The main symptoms are pain and swelling near the base of the thumb. Movements involving the thumb and wrist such as pinching, grasping or wringing make the pain worse.

How is the condition diagnosed?

Finkelstein's test is a simple way of diagnosing DeQuervain's. It can be performed by placing your thumb in the palm of your hand and making a fist around it, then bending your wrist towards your little finger (see picture). If this makes the pain by the base of your thumb worse, the test is considered positive.



If your symptoms don't get better after treatment, then you may need an ultrasound scan to diagnose the problem.

What is the treatment?

Treatment may include:

- **Rest** – it is important to limit the aggravating movements to reduce pain and allow time for the symptoms to settle.
- **Splinting** – We may recommend that you wear an off the shelf or custom made splint. This can limit the movement of your thumb and helps it to rest.
- **Anti-inflammatory painkillers and gels** (e.g. ibuprofen) can reduce pain and inflammation.
- **A referral** to a specialist hand team/consultant/therapist may be required.
- **Physiotherapy** – If your symptoms do settle, we may then give you some stretching and strengthening exercises to increase your hand function. Your physiotherapist will give you advice and explain what might aggravate your symptoms so you can avoid overusing your hand.
- **Steroid injection** – If your symptoms are still present after trying physiotherapy, we may recommend that you have an injection of steroid and anaesthetic into the base of your thumb. This will help reduce the swelling and pain.
- **Surgery** – if the pain persists despite trying the above treatments, the condition may be helped by an operation.

Exercises that can be used to help the condition

Stage 1

You may need to wear a splint continuously for 2-3 weeks to settle the pain before starting to move your thumb or wrist.

- 1) Place your affected hand palm down on a table. Using your 'good' hand, gently move your affected thumb away from the table.

Slowly and smoothly bring your thumb back to the table in line with your fingers.

Repeat 5-10 times every 2 hours.



- 2) Place your affected hand on the table (see picture). Using your 'good' hand, move your affected thumb away from your fingers.

Slowly and smoothly bring your thumb back in line with your fingers.

Repeat 5-10 times every 2 hours.



- 3) Support your forearm on the table with your wrist on the edge of the table and thumb pointing upwards

Slowly lower your wrist (little finger first) towards the floor until you start to feel discomfort (see picture), then use your other hand to return your wrist to the start position.



Repeat 5-10 times every 2 hours.

Stage 2

Try taking the splint off for light daily activities only.

Once you can carry out the stage 1 exercises with no pain, add a small weight and increase the repetitions to 10-20 times every 2 hours. (Reduce the repetitions back to 5-10 times every 2 hours if your pain returns).

Also, begin to do these two new exercises:

- 4) Place your affected hand flat on the table. Keep your hand still and move your thumb out to the side as far as feels comfortable (see picture). Return your thumb back towards your fingers.



Repeat 5-10 times

- 5) Keep your hand in the same position. Lift your thumb away from the table as far as feels comfortable and then bring back down.

Repeat 10 times and increase repetitions as feels comfortable.

Stage 3

Your Physiotherapist will tell you when you can move onto this stage.

Increase the weights and the repetitions of the previous exercises as you are able.

Start to carry out exercise 3 with full active movement of your wrist off the edge of the table (without the assistance of your 'good' hand).

Add wrist strengthening and gentle grip strengthening exercises as your pain allows, and as advised by your therapist.

- Put an elastic band around your fingers and thumb.
- Gently move your thumb against the resistance of the band.
- Repeat 10 times.



Useful telephone numbers

Physiotherapy (John Radcliffe Hospital)
Tel: 01865 221 540 or 01865 221 539

Physiotherapy (Horton General Hospital)
Tel: 01295 229 432

Physiotherapy (East Oxford Health Centre)
Tel : 01865 264 970

Hand Therapy (John Radcliffe Hospital)
Tel: 01865 231 181

Hand Therapy (Nuffield Orthopaedic Centre)
Tel: 01865 738 288

If you have a specific requirement, need an interpreter, a document in Easy Read, another language, large print, Braille or audio version, please call **01865 221 473** or email **PALSJR@ouh.nhs.uk**

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November 2014
Review: November 2017
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