

De Quervain's Disease

What is it?

De Quervain's disease, otherwise known as De Quervain's tenosynovitis or 1st extensor compartment tenosynovitis, is an irritation of the tendons which run to the thumb on the back of the wrist. These tendons travel through separate tunnels at the level of the wrist joint and the tunnels ensure that the tendons do not bowstring when the wrist is extended. Usually, the space inside the tunnel is lubricated by fluid but if inflammation occurs within the tunnel, the tendons can become inflamed and swollen. This causes pain and irritation at the site. De Quervain's disease is inflammation of the tendons of the 1st compartment of the wrist.

What are the symptoms?

Localised pain, swelling and tenderness often occur on the thumb-side of the wrist just proximal to the wrist. This may be associated with worsening of pain on movement of the thumb. It is common in pregnant women due to the hormonal and fluid changes associated with pregnancy. It is also common in breastfeeding mothers for the same reason.

Clinical examination

The patient describes pain on palpation of this area and Finkelstein's test is often used. This is where the patient makes a fist with the thumb inside and moves the wrist away from the affected part of the wrist, which often exacerbates the pain.

What investigations are required?

Usually no investigations are required, although an ultrasound scan or MRI scan may be useful for visualising inflammation.

What are the treatment options?

There are two main options for treatment of De Quervain's disease. These are:

Non-Operative Treatment

This includes splinting and hand therapy. A steroid injection may also relieve pain and alleviate the condition.

Operative Treatment

Surgery is usually performed under a day-case procedure under a local anaesthetic. A tourniquet is placed above the elbow to ensure a bloodless field. The procedure usually takes about 10 minutes to complete. A 2-3cm incision is made over the thumb-side of the wrist and the underlying fat is retracted. Nerves and blood vessels are identified and protected, and the extensor compartment sheath is then opened. The affected tendons are then released and allowed to glide more freely. There are occasional multiple compartments which need to be released. The skin is sutured closed, and dressings are applied. The patient is usually able to return home the same day as the procedure.

Post-Operative Rehabilitation

The patient is fit to go home soon after the operation. The anaesthetic will wear off after approximately 6-8 hours and simple analgesia usually controls the pain (which is started before the local anaesthetic wears off). The hand should be kept elevated but there are no limitations on finger movements and are in fact actively encouraged. The bandage dressings are usually removed after 48 hours and the sticky dressing over the wound is usually left for about 10 days. Sutures are usually removed after 10-14 days. Most patients notice an improvement in their symptoms within the first few days, but some patients have ongoing symptoms for up to three months following surgery. Patients are advised to keep the wound dry until the sutures are removed. The patient may return to driving once the sutures have been removed. Heavy manual work or professions which require frequent handwashing will require at least 2 weeks off work to allow the wound to heal. Some patients may require a longer period off work, and this should be discussed with your surgeon prior to the procedure.

Possible complications

Overall, greater than 95% of patients are happy with the results of the surgery, however complications do occur sometimes.

Some complications specifically related to hand surgery include infection (less than 1% chance), neuroma (less than 1% chance) which is a damaged nerve that becomes painful on reattempts to regenerate, numbness, chronic regional pain syndrome or reflex sympathetic dystrophy (1-2% chance) which is a reaction to surgery which can cause painful or stiff hands.

Specific complications related to De Quervain's disease surgery include failure to completely resolve the symptoms, but this is very rare and occurs in less than 1% of patients. The nerves under the skin at this site are very close to where the incision is made and may be damaged during surgery, which can cause ongoing pain and possibly numbness just beyond the incision site.