



INTRODUCTION

De Quervain's disease

This disabling tendinopathy is a degenerative condition affecting two tendons (abductor pollicis longus and extensor pollicis brevis) on the thumb side of the forearm. It is seen predominantly in females during child bearing age as well as pre-menopausal women.

The condition basically affects the synovial sheath of these tendons. As the tendons become thicker and swollen, the space in the tunnel that keeps them close to the bone (first dorsal extensor compartment) becomes smaller (stenosis). There is less space for the tendons to glide freely, and this aggravates the pain and symptoms.

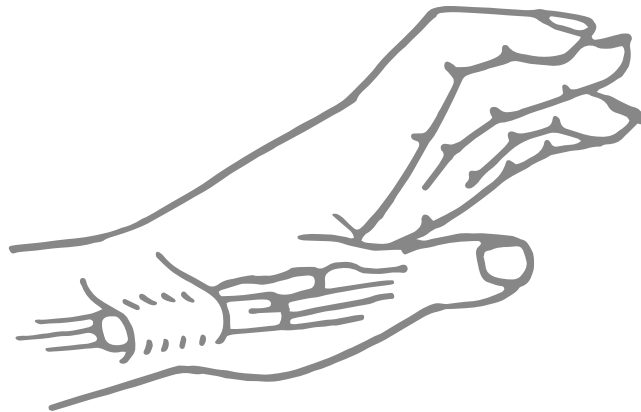
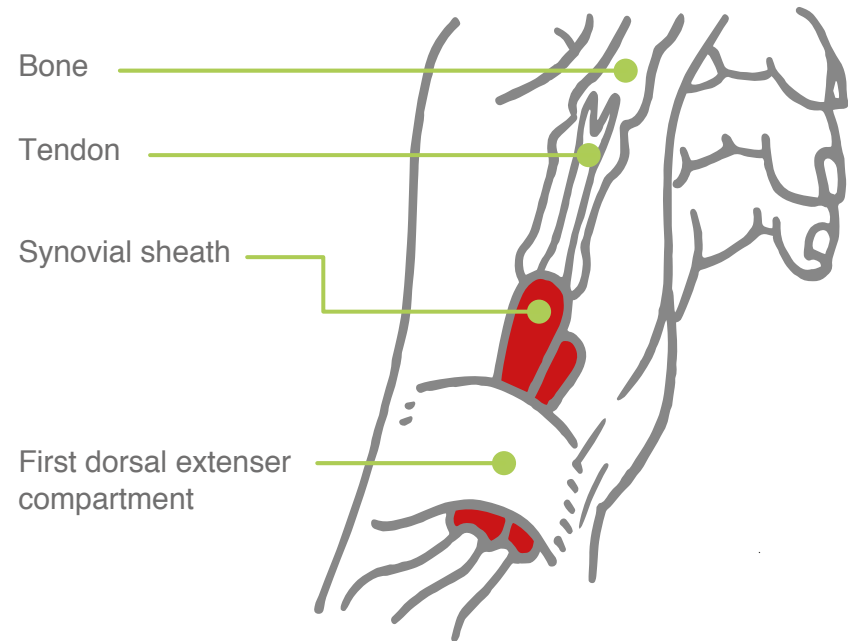


Diagram of anatomy related to De Quervains disease





SYMPTOMS OF

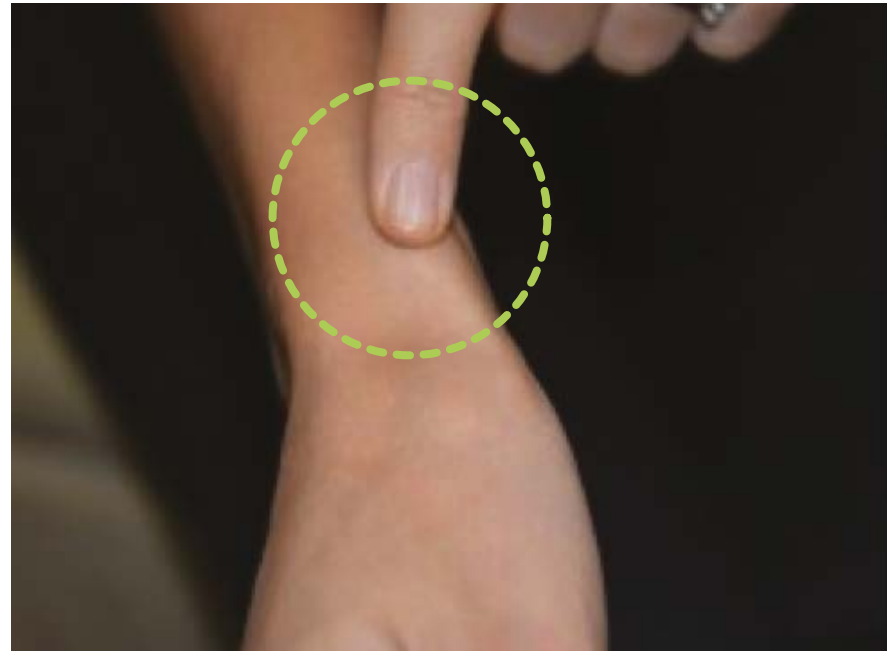
De Quervain's disease

Pain is felt over a very specific place on the radial (thumb) side of the wrist and certain movements like picking a child up under his arms, aggravates the pain. Often wringing and pinching causes pain.

Finkelstein's test (where the thumb is passively flexed and the wrist moved into ulnar deviation) causes significant sharp pain over the radial side of the wrist.

Pain is felt over a very specific place on the radial (thumb) side of the wrist.

Position of pain



Finkelstein's test





TREATMENT

of De Quervain's disease

Treatment comprises avoidance of aggravating motions, splinting (poor response generally) and steroid injections. Steroid injections tend to work well in about 60% of people. These injections, especially multiple ones, may have the side effects of discolouration of the skin and fat atrophy of the skin at the site of injection.

Surgical treatment is an option if conservative treatment fails and is based on releasing the sheath of the first dorsal compartment to create space for free gliding of the tendons.

Steroid injections tend to work well in about 60% of people.

The Surgical Incision for De Quervains release



The operation is usually performed under a general anaesthetic.



A 2-3 cm incision is made on the thumb side of the wrist.



The superficial branch of the radial nerve is identified and protected.



The roof of the first dorsal compartment is released.



The tendons are identified and freed from surrounding tissue.



The membranes around the tendons (synovial sheaths) are excised to create space and ensure better gliding of the tendons.



The skin is closed with subcutaneous monocryl sutures.



A thumb spica cast is fitted.





EXPECTATIONS

After the operation



The wound has to be kept dry and the cast and dressings should not be removed for 10-14 days.



Once the cast is removed with the first wound check, the wrist and thumb can be mobilized.

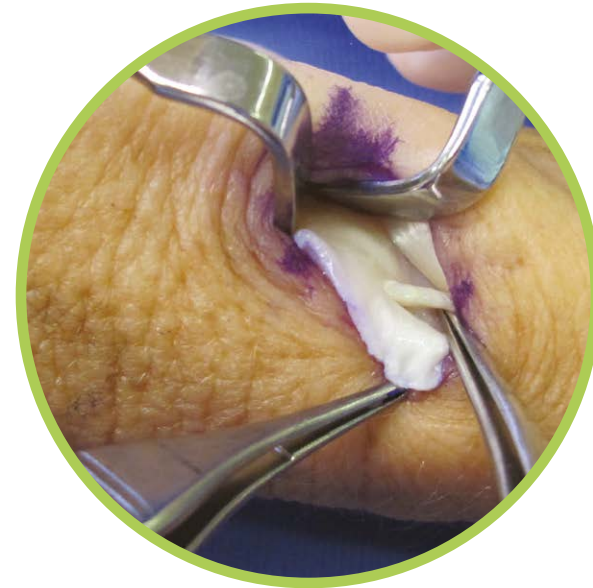


It can take up to 6 months for the thumb and wrist to feel strong again.



2-5%

There is a 2-5% recurrence rate.



POTENTIAL COMPLICATIONS

1. The superficial branch of the radial nerve can be injured during the surgery but this is exceedingly rare.
2. There might be delayed wound healing or wound infection (<1.5%).





REHABILITATION

After the operation

1. Immediately post surgery, elevation of the affected limb, above the level of the heart, is recommended to minimise swelling in the hand and thumb.

2. Tendon glide exercises should commence the same day, to minimise scar adhesions, keep the tendons gliding and to maintain finger movement.

3. Exercises to reduce swelling are also recommended – this involves lifting your hand quickly above your head and lowering it again, while opening and closing your fist.

4. You can use your hand for light activities while the cast is on, but should avoid any heavy lifting or tight gripping.

5. It is imperative that the post operative cast and dressing are kept dry.

6. The cast will be removed at 10-14 days post surgery, when the wound will be reviewed.

7. Once the cast is removed, you can start moving your wrist and thumb.

8. You can try to drive once the cast has been removed, if it does not worsen your pain, and you feel safe and confident to do so.

9. You are advised to respect pain, and to pace yourself as necessary.

10. Scar massage can usually be started about a week to 10 days after the dressings are removed.

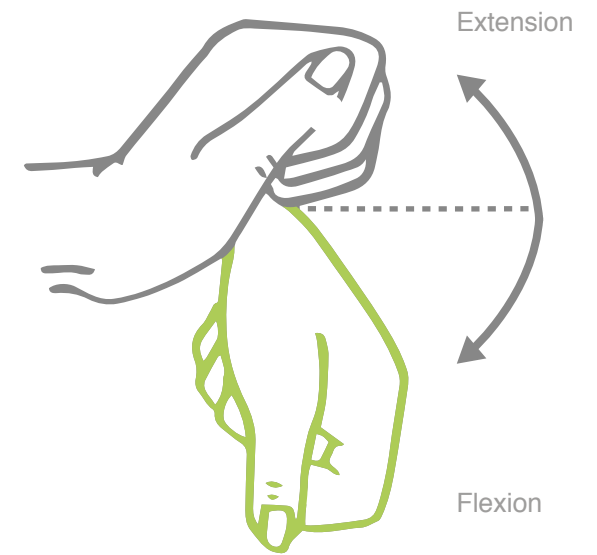
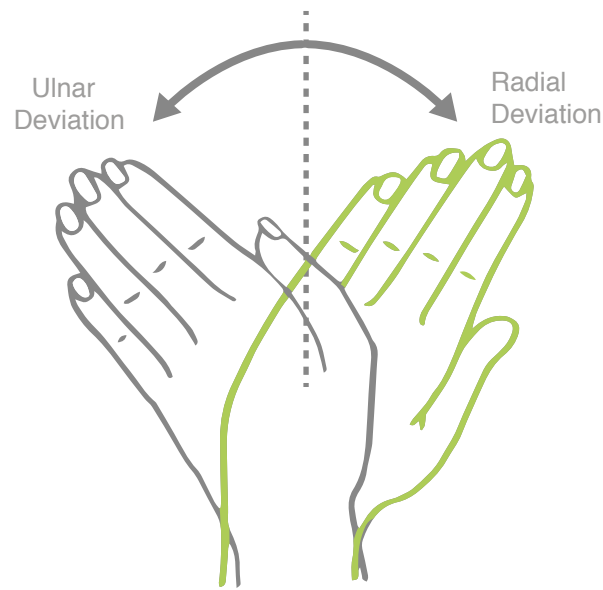
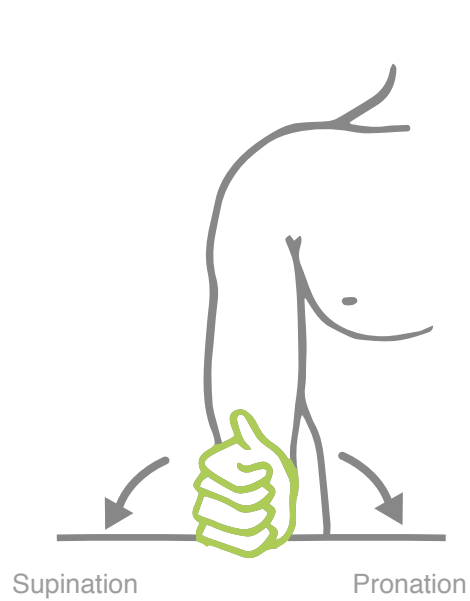
11. Grip and wrist strengthening exercises can be carried out from 6 weeks, if necessary.





EXERCISES

Active wrist exercises





EXERCISES

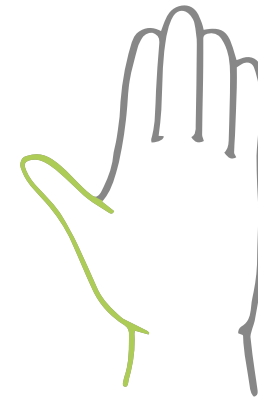
Active thumb exercises



Thumb Extension



Thumb Flexion



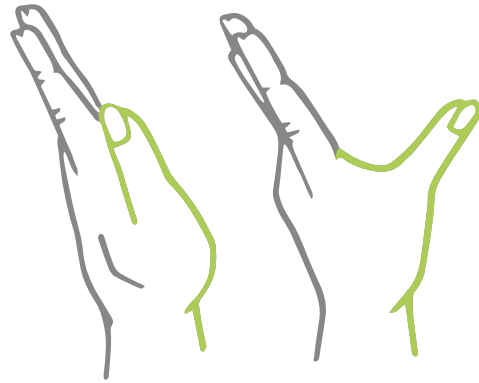
Thumb Opposition



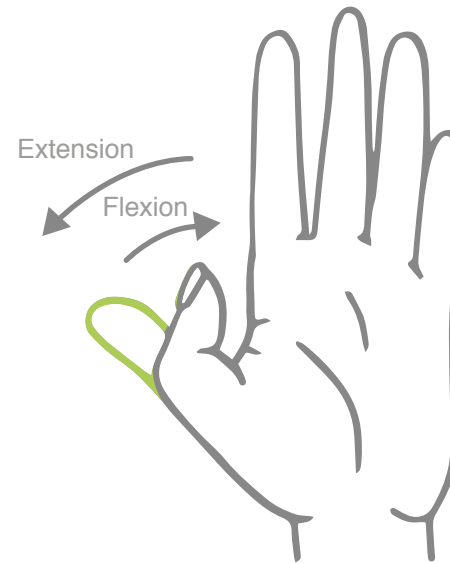


EXERCISES

Active thumb exercises



Thumb Adduction - Thumb Palmar Abduction



Telephone: 021-7627295 | Email: info@capehandsurgery.co.za

www.capehandsurgery.co.za

