

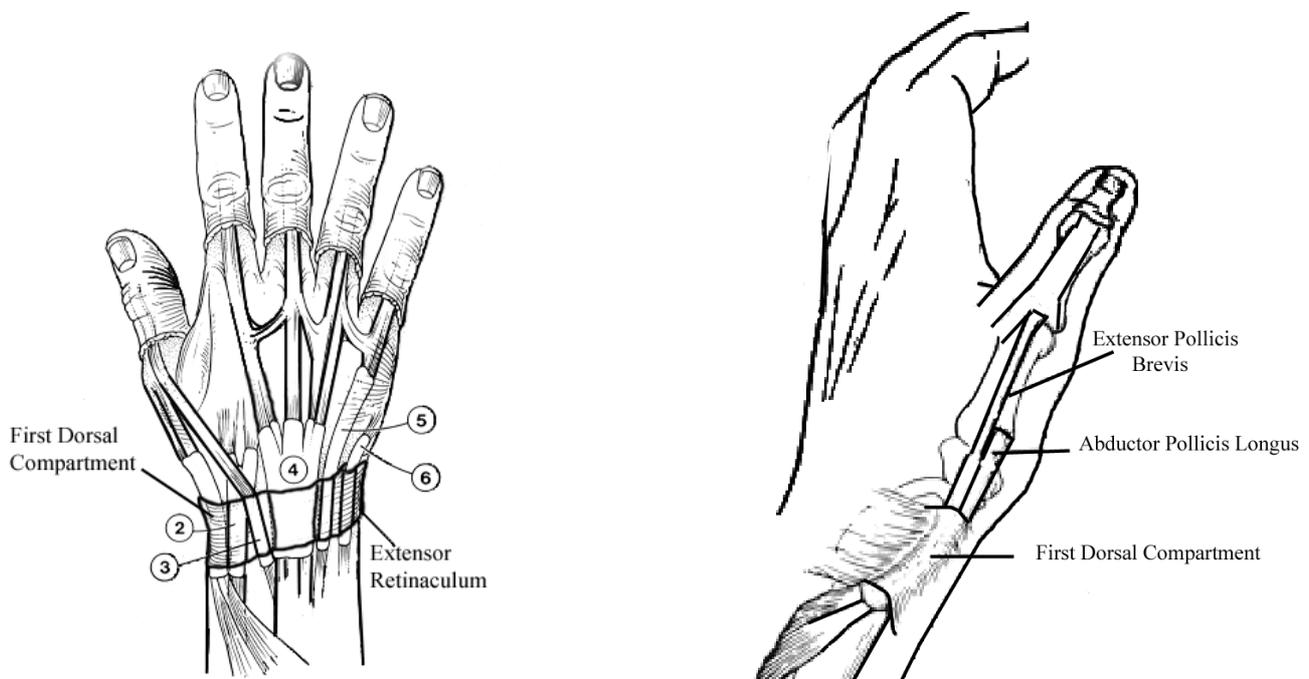
DE QUERVAIN'S TENOSYNOVITIS

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WHAT IS DE QUERVAIN'S STENOSING TENOSYNOVITIS?

It is a painful irritation of the tendons on the thumb side of the wrist. A Swiss surgeon, Fritz de Quervain, described the problem in 1895. Passing over the back (or dorsal surface) of the wrist are the tendons that straighten the thumb, fingers and wrist. These tendons run through six tunnels (compartments) under a thick fibrous layer called the extensor retinaculum.

De Quervain's stenosing tenosynovitis affects the tendons of the first dorsal compartment. The lubricating sheath lining this tunnel thickens and swells, giving the enclosed tendons less room to move. Fine fibres of scar (adhesions) may form between the lining sheath and the tendons.



WHAT CAUSES IT?

The inflammation may be caused by anything that causes swelling or thickening of the tendons. Repetitive trauma, overuse or inflammatory processes are likely causes, but frequently the cause is unknown.

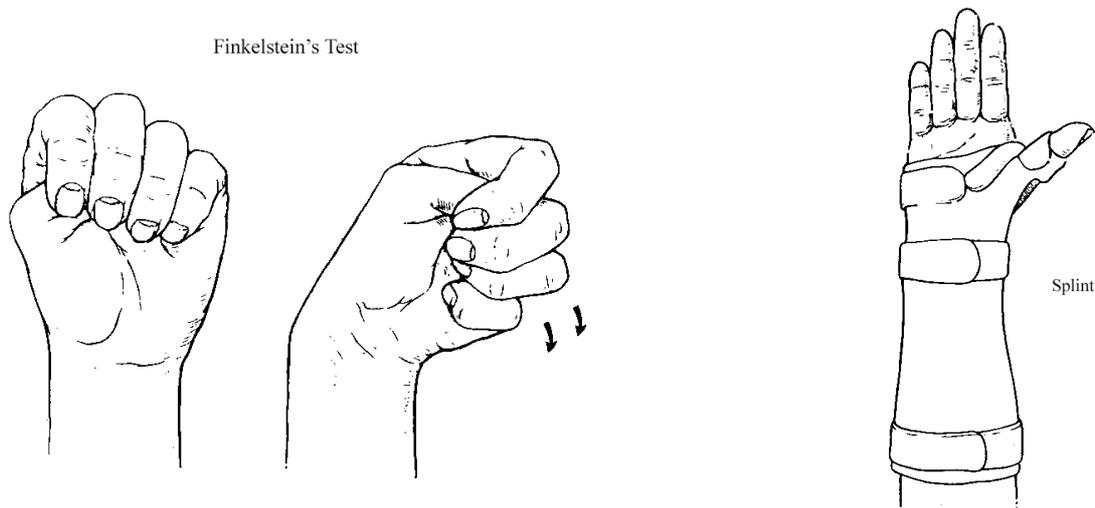
WHO IS LIKELY TO DEVELOP THIS PROBLEM?

De Quervain's stenosing tenosynovitis occurs most often in individuals between 30 and 50 years of age. It is 10 times more common in women. Repetitive activities requiring sideways movement of the wrist while gripping the thumb (eg. hammering, some assembly line jobs) may predispose to developing this disorder. It commonly occurs in mothers with young infants due to a combination of overuse and hormone-related tendon swelling.

WHAT ARE THE SIGNS AND SYMPTOMS?

The main symptom is pain over the thumb side of the wrist. It may develop suddenly or gradually. It is worse with use of the hand and thumb, especially forceful grasping, pinching and twisting. There may be swelling at the site of pain and "snapping" when the thumb is moved. Due to pain and swelling, thumb movement may be reduced.

A positive Finkelstein's test is usual. In this test, the patient makes a fist with the thumb placed in the palm and bends the wrist. This test will cause pain in patients with the problem.



NON-OPERATIVE TREATMENT

The initial treatment is to rest the wrist with a 4 week period of wearing a splint that immobilizes the wrist and thumb. The splint is worn day and night and is only taken off to shower or wash the hand. In most cases the area is also injected with a steroid as this is a strong anti-inflammatory and helps reduce the swelling. This usually takes 3 to 4 weeks to be effective. After four weeks in a splint, the hand therapist will start a series of stretching exercises to regain movement without redeveloping the symptoms

WHEN IS SURGERY NECESSARY?

If the symptoms are longstanding (more than 3 months) or conservative treatment has failed, surgery is indicated. This is usually day surgery.

SURGERY

The operation is performed under local anaesthetic and sedation. A 1-2cm incision is made in a skin crease at the wrist and the first compartment is divided. A dressing including a lightweight fiberglass splint is applied. Pain relief may be required for 3-4 days. After 10-14 days all dressings are removed and an exercise program is started. You may not be able to drive for 2 weeks after surgery, as your wrist will be weak and stiff. Although you will be doing most things normally after several weeks, it will take almost 3 months to fully recover.

RISKS

Recurrence of the symptoms is very rare. Possible problems after the surgery include irritation of the small nerves which give feeling to the area of skin on the wrist and back of the hand causing numbness or a burning sensation in that area and subluxation (abnormal movement) of the released tendons. Both these complications are very infrequent.