



Vasu Pai D orth, MS, National Board [orth],MCh, FRACS, FICMR

de Quervain's Tenosynovitis

The condition called de Quervain's tenosynovitis causes pain on the outside of the wrist and forearm just above the thumb.

It is a common in middle aged females

Usually easy to diagnose.

When non-operative treatment fails, may need surgical release

What part of my thumb and wrist is causing problems?

De Quervain's tenosynovitis affects **two thumb tendons**.

These tendons are the abductor pollicis longus & extensor pollicis brevis

On their way to the thumb, the APL and EPB tendons travel side by side along the inside edge of the wrist. They pass through a **tunnel** near the end of the radius bone of the forearm.

This tunnel is lined with a slippery coating called tenosynovium. The tenosynovium is a slippery covering that allows the two tendons to glide easily back and forth as they move the thumb. Inflammation of the tenosynovium and tendon is called tenosynovitis. In de Quervain's tenosynovitis, the inflammation constricts the movement of the tendons within the tunnel.



How did this condition develop?

Repeatedly performing hand and thumb motions such as grasping, pinching, squeezing, or wringing may lead to the inflammation of tenosynovitis.

This inflammation can lead to swelling, which hampers the smooth gliding action of the tendons within the tunnel.

Arthritic diseases that affect the whole body, such as rheumatoid arthritis, can also cause tenosynovitis in the thumb.

In other cases, scar tissue from an injury can make it difficult for the tendons to slide easily through the tunnel.

What problems does this condition cause?

1. The trouble may be soreness on the thumb side of the forearm, near the wrist.
2. As the friction increases, the two tendons may actually begin to squeak as they move through the constricted tunnel. This noise is called crepitus.
3. Grasping objects with the thumb and hand may become increasingly painful.

What tests will my doctor want to do?

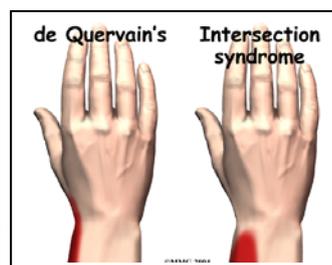
Doctors usually diagnose de Quervain's tenosynovitis easily

Most of the time no special tests are required.

Distinguish de Quervain's tenosynovitis from intersection syndrome

Finklestein test is one of the best ways to make the diagnosis.

You can do this test yourself. Bend your thumb into the palm and grasp the thumb with your fingers making a fist with the thumb inside



How can I make the pain go away?

Nonsurgical Treatment

Avoid all activities that cause your symptoms.

Take frequent breaks when doing repeated hand and thumb actions. Avoid repetitive hand motions.

Keep the wrist in a neutral alignment.

Thumb splint called a thumb-spica splint.

Anti-inflammatory medications

If these simple measures fail to control your symptoms, your doctor may suggest an injection of cortisone into the irritated tunnel. Cortisone reduces the swelling of the tenosynovium and may temporarily relieve your symptoms.

Surgery

The surgeon performs a surgical release of the roof of the tunnel.

This surgery can usually be done on a day surgery basis

It can be done using a general anesthetic, which puts you to sleep, or a regional anesthetic.

The first step in the surgical release is to make a **small incision** along the thumb side of the wrist.

This allows the tunnel to open up, creating more space for the tendons. The tunnel will eventually heal closed, but it will be larger than before. Scar tissue will fill the gap where the tunnel was cut.

What can I expect after treatment?

Rehabilitation is more involved after surgery.

Full recovery could take several months.

Pain and symptoms generally begin to improve after surgery, but you may have tenderness in the area of the incision for several months.

Take time during the day to support your arm with your hand elevated

You should move your fingers and thumb occasionally during the day.

Your stitches will be removed 10 to 14 days after surgery.

What may go wrong?

Painful scar

Neuroma

Infection 1%

Chronic Regional Pain Syndrome

Incomplete release leading to recurrence of symptoms