

De Quervain's Tenosynovitis



What is De Quervain's Tenosynovitis?

De Quervain's tenosynovitis is a condition that causes pain on the **thumb side of the wrist**, particularly during gripping or lifting activities. It occurs when the tendons that move the thumb become irritated as they pass through a narrow tunnel at the wrist.

Two tendons are involved in this condition—the **abductor pollicis longus (APL)** and **extensor pollicis brevis (EPB)** tendons. These tendons run through a structure called the **first dorsal compartment**. When this tunnel becomes tight or inflamed, tendon movement becomes restricted, leading to pain and swelling.

This condition commonly affects adults and may develop gradually over time, particularly with repeated thumb or wrist use.

Causes and Risk Factors

De Quervain's tenosynovitis develops when irritation or thickening occurs within the tendon sheath, restricting smooth tendon movement.

Common contributing factors include:

Repetitive Hand Use

Activities involving repeated thumb movements or gripping may increase stress on the tendons.

Examples include:

- Lifting or carrying objects
- Repetitive hand tasks
- Certain sports or hobbies
- Frequent use of mobile devices

Overuse or Strain

Sudden increases in activity levels or repetitive strain may lead to inflammation.

Pregnancy and Caring for Infants

This condition is commonly seen in new parents, particularly due to repeated lifting of infants.

Age

De Quervain's tenosynovitis most commonly affects adults between **30 and 50 years of age**, although it can occur at any age.

Inflammatory Conditions

Conditions such as rheumatoid arthritis may increase the risk.

Symptoms

Symptoms of De Quervain's tenosynovitis typically develop gradually but may worsen with activity.

Common signs include:

- **Pain** on the thumb side of the wrist
- **Swelling** near the base of the thumb
- **Pain when gripping or lifting objects**
- **Difficulty using the thumb**, particularly during pinching movements
- **Tenderness** over the thumb side of the wrist
- **Pain when moving the thumb or wrist**
- **Reduced grip strength**

Pain may worsen when performing activities such as:

- Lifting a kettle or pan
- Turning a key
- Opening jars
- Lifting a child

Some patients notice a **clicking sensation** when moving the thumb.

Diagnosis & Investigation

De Quervain's tenosynovitis is diagnosed **based on clinical history and physical examination**.

During your visit:

- The surgeon will ask about **the duration of symptoms**, daily activities, and any repetitive movements.
- A **physical examination** will assess tenderness and movement of the thumb and wrist.

A specific test known as the **Finkelstein's test** may be performed. This involves bending the thumb into the palm and gently moving the wrist to reproduce symptoms.

Imaging

- Imaging is **not usually required**.
 - In **rare cases**, ultrasound may be used to assess tendon movement or confirm the diagnosis.
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Non-Surgical Treatment

Most cases of De Quervain's tenosynovitis can be treated without surgery.

Non-surgical treatment options may include:

- **Splinting**, to rest the thumb and wrist
- **Activity modification**, avoiding repetitive thumb movements
- **Pain relief medication**, such as paracetamol or anti-inflammatory medication
- **Corticosteroid injection**, which is often highly effective in reducing inflammation
- **Hand therapy**, including exercises and advice on activity modification

Corticosteroid injections are commonly performed in the clinic and may provide significant symptom relief.

Surgical Treatment

Surgery may be recommended if symptoms persist despite non-surgical treatment.

First Dorsal Compartment Release

This procedure involves releasing the tight sheath surrounding the tendons in the **first dorsal compartment**, allowing the tendons to move freely.

Key points about the procedure:

- Usually performed as a **day-case procedure**
- Typically carried out under **local anaesthetic**
- A **small incision** is made over the thumb side of the wrist
- The tight tendon sheath is carefully released
- The surgeon checks that the tendons move freely before closing the wound

This procedure is generally very effective at relieving symptoms.

Recovery

Recovery following treatment depends on the severity of the condition and the treatment used.

- **Hand therapy** is often recommended to restore movement and strength.
- Some swelling and tenderness are common after treatment.

Recovery times vary depending on treatment:

- Following **corticosteroid injection**, symptoms may improve within **days to weeks**.
 - After **surgical release**, light activities may resume within **1–2 weeks**.
 - Most patients regain good function once the wound has healed.
 - Full recovery of strength and comfort may take **several weeks**.
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Risks

Although treatment is usually successful, complications can occur, including:

- Infection
- Scar tenderness
- Persistent symptoms
- Stiffness
- Injury to nearby nerves (rare)
- Recurrence of symptoms (uncommon)

Early treatment often improves outcomes.

When to See One of Our Hand Specialists

You should consult a hand specialist if:

- You have **persistent pain** on the thumb side of the wrist
- Pain interferes with gripping or lifting activities
- Symptoms are not improving with rest
- You experience difficulty using your thumb
- Symptoms continue despite splinting or medication

If you have sustained a severe injury, have significant swelling, or have an open wound associated with trauma, this should be assessed urgently in the Emergency Department (A&E).

Book an appointment:

