What Causes deQuervain’s Tenosynovitis?

DeQuervain’s Tenosynovitis is caused by the inflammation of the tendons that straighten or bring the thumb away from the hand. Causes include repetitive pinching or gripping combined with tilting of the wrist. Maintaining a prolonged position of pinch or grasp combined with tilting the wrist toward the little finger may also cause inflammation. DeQuervain’s may also be caused by a direct blow to the side of the wrist or by (or from) a ganglion cyst.

How Can deQuervain’s Tenosynovitis Affect You?

Mild to moderate cases may experience pain with, or be unable to perform, writing, infant and child care, office tasks (i.e. filing or keyboarding), lifting items like books or milk cartons, performing ball or racquet sports, or other tasks requiring sustained or repetitive use of the thumb, or grasping/lifting involving the thumb. You may experience local swelling, tenderness, or catching of the thumb. In severe cases, there may be a loss of hand function due to chronic pain.

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What Can Happen if You Don’t Seek Treatment for deQuervain’s Tenosynovitis?

Prompt treatment results in quicker improvement and better long-term results, often helping to eliminate the need for surgery. Delaying treatment may lead to chronic inflammation, thickening of the tissues, and occasionally even locking of the tendon, preventing full thumb motion. Pain in the base of the thumb may also lead to unnatural ways of moving that may cause stress on other areas as the elbow or shoulder.

What Are Some Options for Correction of deQuervain’s Tenosynovitis?

In mild cases, activity modifications may sufficiently correct your condition. In more severe cases, your hand surgeon will make a diagnosis and explain your options based upon the severity of your condition:

- **Conservative treatment** may include appropriate splinting of thumb and wrist (i.e. not just a wrist splint), oral anti-inflammatories, and referral to a hand therapist.
- The surgeon may choose a steroid injection if conservative treatment fails or if the condition is moderate to severe.
- If pain continues to limit hand function despite conservative rehabilitation efforts, surgery may be indicated. The surgical procedure involves release of the tendon’s compartment, or canal, to free up the constricted tendon.

What Does Your Hand Therapist Do to Help Correct this Condition?

Depending on the condition’s severity, your hand therapist may choose any of the following rehabilitation methods:

- Your hand therapist will do an individualized assessment of pain levels, swelling, motion limitations, strength limitations, and difficulties with daily activities and work tasks in order to best proceed with rehabilitation.
- You may need a custom fabricated splint in order to reduce swelling. Your hand therapist will measure you and fit the splint to your thumb, wrist and/or forearm.
- Exercises in and outside the hand therapy clinic may be prescribed to restore tendon gliding and pain-free movement while avoiding further inflammation. Your hand therapist will work with you to determine which activities have caused or perpetuated the problem, and then will make suggestions for reducing strain to the tendons.
- Your hand therapist may also choose to treat your condition through various massage and soft-tissue mobilization techniques at the wrist or forearm. Elastic taping may be used for control of pain or swelling. Ice and other modalities may also be used to control swelling.
- Occasionally your hand therapist may visit your work site to determine appropriate ergonomic modifications.
- If your condition should require surgical treatment, your hand therapist will assist you in recovering from surgery, considering all areas such as pain, swelling, wound care, motion, scar management, hypersensitivity, function, strengthening, and conditioning for return to work.

Disclaimer: These education topics should not be construed as including all proper methods of care or excluding other acceptable methods of care reasonably directed to obtaining the same results. The final judgment regarding any specific procedure or treatment must be made by the hand therapist in light of all circumstances presented by the patient and the resources available.