



Tenosynovitis



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What are tendons?

The muscles that move the fingers and wrist are attached to the bones in the hand and wrist by rope-like extensions called tendons that pass through tunnels to get to the wrist and/or fingers. Tendons can be palpated on both sides of the hand.

What is synovium?

The tendons are surrounded by a layer of tissue that produces fluid to nourish and lubricate the tendons. This fluid environment allows the tendons to easily glide as the fingers and wrist move through space.

What is tenosynovitis?

It means inflammation and swelling. When the tendon or synovium is swollen and painful, we call that tenosynovitis.

What is a trigger finger?

When the tendon becomes swollen or develops a nodule, it often catches in one of the tunnels in the finger or hand. This causes a popping or catching when the affected finger is moved. When the tendon catches, it may produce more inflammation and swelling to cause a vicious cycle of triggering, inflammation, and swelling. A finger may become locked or stuck from the swelling of the tendon in the tendon sheath.

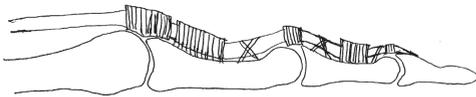


Diagram 1

Normal anatomy of the flexor tendon sheath



Diagram 2

Anatomy of the first dorsal compartment

What causes it?

Usually the cause of this condition is unclear. Several medical conditions such as rheumatoid arthritis, gout, and diabetes may be associated with trigger fingers.

What are the symptoms?

Trigger fingers or thumbs often begin as pain at the base of the digit. Thickening may be palpated at the base of the finger or thumb. When the finger begins to trigger, it seems that the problem is in the middle joint of the finger.

How is it treated?

The goal of treatment for trigger fingers or DeQuervain's syndrome is to stop the catching and allow complete and normal motion without pain. Swelling of the tendon must be reduced to allow smooth gliding of the tendon. Anti-inflammatory medications or steroid injections may be recommended as the first line of therapy.

If non-surgical methods of therapy are not successful, surgery may be recommended. This surgery is usually done as an outpatient with local anesthesia. Some patients may have some residual discomfort after surgery but active motion is begun immediately after surgery. Normal hand use is anticipated after the perioperative discomfort has passed.

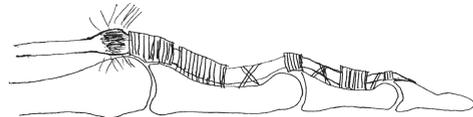


Diagram 3

Abnormal swelling of the flexor tendon catching on the tendon sheath