

Dupuytren's Contracture Treatment Guidelines

Dupuytren's contracture is a condition that affects the hand, causing one or more fingers to become permanently bent towards the palm. It occurs due to an abnormal thickening of the tissue beneath the skin in the palm and fingers.

Currently, there is no cure for Dupuytren's disease. However, the condition is neither life-threatening nor limb-threatening. Dupuytren's is not a malignancy (cancer) and does not spread to vital organs such as the heart, lungs, or brain.

Here are some treatment options for this condition:

Non-surgical options

- **Steroid injection**

Corticosteroids are potent anti-inflammatory drugs that can be injected into a painful nodule to alleviate symptoms. The effectiveness of a steroid injection varies among patients. While corticosteroids can provide symptomatic relief, they are unlikely to halt the progression of the disease; thus, they serve as a treatment rather than a cure.

- **Splinting**

Splinting is not recognized as a method to halt the progression of a finger contracture. Furthermore, forcefully stretching a contracted finger is not beneficial and may even result in injury to the finger or hand.

Splinting can be employed post-surgery to safeguard the surgical site for Dupuytren's contracture. However, it remains unclear whether wearing a splint reduces the risk of recurrent contracture or the tightening of the healing wound.

- **Collagenase injection**

The collagen in a Dupuytren's cord differs from the collagen in other hand structures like tendons, nerves, blood vessels, and bones. An injectable medication has been developed to exploit these differences.

Collagenases are enzymes that break down collagen. A specialized collagenase targets and breaks down the collagen in Dupuytren's cords without harming other critical hand structures. When injected correctly, this enzyme can rupture the cord, improving the motion of the affected finger or thumb. Though it doesn't eliminate the cord, it can significantly improve symptoms.

- **Needle aponeurotomy**

Needle aponeurotomy can often be performed in an office setting with local anesthesia (a numbing injection). During this procedure, a small needle is inserted into the Dupuytren's cord and meticulously maneuvered until it cuts through the cord completely. Although this technique does not remove the cord, breaking it enhances finger mobility. Similar to collagenase injections, this treatment may have a higher likelihood of disease recurrence compared to surgical options.

Surgical treatments

The surgical procedures most commonly performed for Dupuytren's contracture are:

- **Fasciotomy**

In this procedure, the surgeon makes an incision along the affected finger or thumb, exposing and releasing the tight cord of tissue causing the contracture. Once the cord is released, the skin overlying it may be left open so that it can heal on its own, or it may be sutured closed.

- **Partial palmar fasciectomy**

This is a more extensive surgery than a fasciotomy. It involves removing the affected tissue from the palm of the hand and releasing any tight cords or nodules in the fingers or thumb. The incision may be left open to heal or closed with sutures.

Reference

OrthoInfo. (2017). *Dupuytren's disease - Dupuytren's contracture - orthoinfo - AAOS*. American Academy of Orthopaedic Surgeons. <https://orthoinfo.aaos.org/en/diseases--conditions/dupuytren-disease/>