Dupuytren’s Contracture

Dupuytren’s contracture, or palmar fibromatosis, is a hereditary thickening of a thick fascial (connective tissue) band in the palm of the hand called the palmar fascia. The thickening can cause prominent nodules in the palm, and can cause bands of thickened tissue to grow along the palm and into the fingers, and cause contracture of the finger joints. Dupuytren’s contracture is a benign (non-cancerous) condition that can be locally aggressive. Dupuytren’s can occur on the sole of the foot, where it is called Lederhosen’s disease or plantar fibromatosis. It does not cause deformity or contracture, but can cause painful nodules on the sole of the foot. Dupuytren’s can also occur on male genitalia where it is called Peyronie’s disease. Some unfortunate men can have all 3 sites affected, a condition called Dupuytren's diathesis.

Symptoms:

Pain is not a typical feature of Dupuytren’s contracture. Painless nodules in the palm is usually the first noticeable symptom. As the condition progresses, bands or cords of tissue can grow along the flexor tendons into the fingers. The cords can contract and draw the fingers towards the palm resulting in flexed finger deformity. Pain can occur with repetitive or forceful gripping. Contractures are usually progressive, though sometimes very slowly.

Cause:

There is no known cause, although the condition is felt to be hereditary, particularly in people of Northern European and Scandinavian descent. Risk factors for the development of Dupuytren’s include cigarette smoking, excessive alcohol consumption, vascular disease, seizure disorder, and diabetes. The frequency of Dupuytren’s increases with age, and men are affected more commonly than women.
Diagnosis:
A careful history and physical examination will diagnose Dupuytren’s contracture. X-rays, ultrasound, and MRI are not typically helpful. The hallmarks of diagnosis are nodules, cords or lumps in the palm, and the characteristic finger contracture. More than one finger may be affected.

Treatment:
Initial treatment is often observation, as the condition only requires treatment when significant contracture develops. Dupuytren’s can be very slow to progress, and some people only develop painful nodules without contracture. Younger people often have more rapid progression.

Nonsurgical Treatment:
There is really no nonsurgical treatment for Dupuytren’s, other than observation. Physical therapy, splinting, and cortisone injection have very limited roles. Modifying risk factors (avoiding cigarettes and excessive alcohol, diabetes control) may help slow the progression of this condition.

Surgery:
Surgery is often recommended when finger contractures develop that limit the function of the hand, or cause significant deformity. Surgery usually involves extensive incisions along the palm of the hand and fingers to remove the proliferative tissue and free the joints from contracture.

A relatively new way to treat some patients with Dupuytren’s contracture is with Xiaflex injections. Xiaflex is a medication that is injected into the thickened tissue (cords) that helps break down the tissue chemically. Precise injection is required, often using ultrasound guidance, to avoid injecting the medication into nerves, blood vessels, and tendons. The injection procedure is followed the next day with a finger manipulation, to mechanically disrupt the partially dissolved cord and free the finger from contracture. Both procedures are commonly done in the office under local anesthesia. Xiaflex is a minimally-invasive technique, and has similar success with surgery in correcting contracture, but the recurrence rate may be slightly higher. The medication is FDA-approved, and is covered by most insurances. Certification is required to administer the medication and Dr. Krull is currently certified.