

# DUPUYTREN'S DISEASE



## WHAT IS...

### **Dupuytren's Disease?**

Dupuytren's (pronounced DOO-puh-trehns) is a connective tissue disease that affects one or both hands. The disease causes raised nodules and dimples in the skin of the palm that eventually tighten and begin to pull the fingers into a bent position. Cords resembling tendons become present in the palm due to the disease's affect on the tissue. The fingers most often affected are the thumb, ring, and small fingers. Dupuytren's typically takes ten years to develop. It is more common in men than women, especially men of Eastern European descent. Many people who have Dupuytren's have a family history of the disease.

### **What Causes Dupuytren's Disease?**

The cause of Dupuytren's Disease remains unknown. What is known is that the disease results in thickening and hardening of the tissue on the hand, located in the palm, known as the fascia. Cells called fibroblasts, that are normally responsible for closing open wounds, are found within the diseased tissue. The reason for the activation of these cells is a mystery since Dupuytren's can strike when there has been no damage to the hand.

### **How Can Dupuytren's Disease Affect You?**

People with Dupuytren's Disease live normal and fully functional lives. However, as the disease progresses, it makes use of the involved hand or hands more difficult. Straightening the fingers and spreading them apart are the most affected movements. In most cases, the ability to bend the fingers is preserved, while activities that involve opening the hand become problematic. Functionally, this affects the ability to grasp around and release large objects. Bent fingers can also

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create problems upon attempting to perform activities such as shaking hands, putting the hand into pockets or gloves, and holding large objects.

## What Can Happen if You Don't Seek Treatment for Dupuytren's Disease?


Function will continue to become more limited as fingers curl and cannot be opened or spread apart. Fingers that stay in a significantly bent position over an extended period can be very difficult to straighten again after the corrective procedure is completed. If allowed to progress beyond the severe stage, the circulation and nerve function of the involved fingers could be compromised. This could ultimately lead to the need to amputate part of the fingers.

## What Are Some Options for Correction of Dupuytren's Disease?

To date, the most successful and widely accepted means of correcting Dupuytren's is through surgical removal of the diseased tissue from the palm and the fingers. Surgeons use several variations of the surgical procedure, as the surgeon's choice depends upon the severity of the condition. Some procedures are more extensive and others less extensive. Surgery will be performed when the disease has progressed to a stage where function is being compromised. This usually means that the big joint of a finger (called the MCP joint) and/or the center knuckle of the finger are being bent to at least 30 degrees. While surgery is common, some

**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.

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individuals with very slow progressing disease may never require surgery, or will at least be able to delay surgery for many years longer than is typical.

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

Hand therapy for Dupuytren's Disease begins after the corrective surgery has been completed. The surgeon performing the corrective procedure will typically refer a patient to the hand therapist 1-2 days following the procedure in order to begin wound care, edema (swelling) management, a splinting regimen to maintain straight fingers, and movement exercises. Splinting starts out full-time post-surgery, but will eventually be decreased to nighttime only. Typically, patients wear splints for up to six months following surgery. As healing continues, your hand therapist will instruct you in scar control, including massage, and strengthening activities. In some cases, heat, ice, and ultrasound may be used as adjuncts to treatment. Your hand therapist will also ensure that you can quickly resume self-care, work, and leisure activities that you enjoy.

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