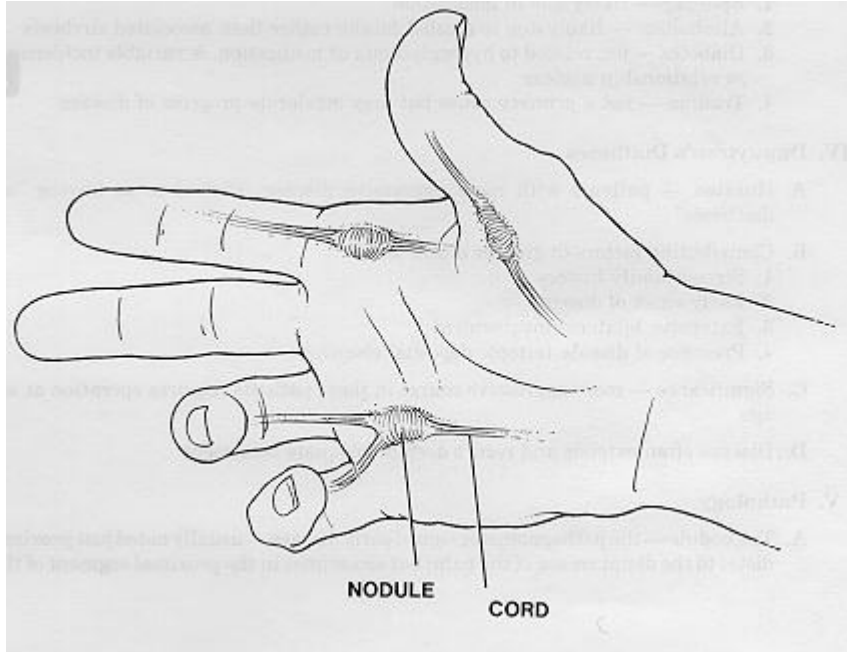


Dupuytren's Contracture

Dupuytren's (pronounced dupe-a trenz) contracture is a common disorder that affects the palm of the hand, causing the fingers to be drawn down into the palm. There is a normal tissue in the palm called "palmar fascia" (pronounced fash-a) which is located between the skin and the tendons. Usually that fascia just provides strength and support for the palm, but in people with Dupuytren's contracture, the fascia starts to shorten, causing nodules in the palm and eventually cords that pull the fingers into a flexed position.



The cause of Dupuytren's contracture is unknown, but the popular theory is that it is somewhat linked to genetics. It is much more common in people of northern European ancestry than other peoples of the world. We also can't predict how badly the disease will affect any given individual, but there are certain prognostic signs that may indicate how it will behave. For example, the younger the age when the disease begins, the more aggressive the disease may be. Also, patients with both hands involved tend to develop worse contractures than people with only one hand involved. ("Contracture" means that the fingers are flexed down toward the palm.)

Dupuytren's contracture can be treated either with surgery to remove the offending fibrous tissue, or by Needle Aponeurotomy, which just divides the contracted tissue. Dr. Bitter can help you decide which of these options is best for you.

Dupuytren's Contracture Excision is done as an outpatient operation, either under a general anesthetic or by just numbing the affected arm. Incisions are made through the skin and the underlying diseased fascial cords are carefully removed. The location and extent of the incisions vary, but they can be fairly extensive if the disease is widespread in the hand. Sometimes I leave one of the incisions open (in other words, I don't stitch it closed) and it usually heals nicely on its own over about 6 weeks. We can't predict how

any given individual will respond to pain, but many patients seem to have relatively little pain after the operation. After the operation the hand is put in a splint, but usually within a week exercises are started to get the fingers moving. These exercises, and perhaps different types of splints, are used for several months to try to make the fingers move as normally as possible.

As with all surgery, there are risks with Dupuytren's contracture surgery. Some of the possible risks are listed here.

- Infections occur rarely, but if an infection develops, antibiotics or further surgery may be necessary to control the problem.
- Excessive bleeding can also arise, and a collection of blood can form inside the wound. Surgery may be needed to drain the collection, or sometimes it may just make the wound lumpy for some time. Because of the risk of bleeding, aspirin-containing products should not be taken for ten days prior to surgery and for ten days afterwards.
- Wound healing can be slow after Dupuytren's surgery, partially because we will start the hand moving as soon as possible to try to maximize finger function. Smoking interferes with wound healing, and so it is recommended that you not smoke for at least 6 weeks before and after the operation.
- There are important anatomic structures right around the diseased tissue to be removed, which means that some normal structure could be injured. The greatest risk is to the nerves supplying sensation to the tips of the fingers, which are intimately associated with the Dupuytren's tissue. Injury to a nerve could lead to numbness at the tip of the involved finger. *Great* care is taken to avoid injury to the nerves.
- Although we try to get the fingers moving normally at the end of the rehabilitation program, not all patients are able to ultimately achieve normal motion. How much residual finger stiffness you may have depends on several factors, including how badly your fingers are contracted, how long they have been contracted, and how much arthritis you may have.
- Dupuytren's disease can come back after Dupuytren's surgery. How likely you are to have a recurrence depends on some of the prognostic factors mentioned above, and on your age.
- You will either have a general anesthetic for your operation, or perhaps your arm may just be numbed. You, the anesthesiologist, and I will all have input into the type of anesthesia you have, but I try to go along with your preference. All anesthetic procedures involve some risk, and the anesthesiologist can discuss those risks with you before your operation.

Needle Aponeurotomy is done in the office under local anesthesia. A small needle is put in to the hand at several levels and the bevel of the needle is used to cut the underlying contracted connective tissue. The connective tissue is not removed, but rather it is just divided to allow the finger to extend better. Afterward, the hand is usually put in a light dressing and gentle exercises are started. Heavy activities should be avoided for about two weeks after this procedure. The risks of needle aponeurotomy include the following:

- Infection can rarely occur due to the needle which penetrates the skin.
- Skin tears can occur as the finger is stretched out into extension.
- It is possible that the nerves near the contracted Dupuytren's tissue could be injured by the needle. This would result in loss of sensation of the affected finger. The risk of nerve injury varies depending on the location of the contracting Dupuytren's tissue in the finger.
- Not always can the contracted finger be extended completely after needle aponeurotomy.
- After needle aponeurotomy, recurrence of finger contracture due to Dupuytren's disease is felt to occur at least twice as early when compared to Dupuytren's excision surgery.