**What is it?**
- Dupuytren's disease is a thickening and shrinking of the layer of flesh just under the skin of the palm. It can cause lumps or dimples in the skin of the palm, and can draw the fingers down into a bent position. It is named after a surgeon who wrote about its treatment.

**What caused it?**
- There is a layer of tissue, called fascia, under the skin of the palm which helps keep the skin from sliding around when you grip things. In some people, this tissue shrinks, and pulls on the skin and on the fingers.

- The ring and the small fingers are affected more often than the others, although any or all of the digits may be involved.
The problem appears to be inherited, and usually begins in adulthood for no clear reason. It is painless and benign, but unpredictable - some people will only have a lump, others a very difficult problem with severely bent fingers.

What can you do to help?
- Unfortunately, not much other than wait and watch. Have it checked out to confirm that this is the problem, and don't wait until the fingers are bent into a fist.

What can a therapist do to help?
- For a severe problem, a therapist may be able to make a custom splint or brace to stretch the fingers out a little more straight. If surgery can't be done, this may help regain some movement of the fingers, but requires using the splint every day. This type of program may also help right before surgery, to make the surgery less complicated and more safe.
- After surgery, a therapy program of massage, wound care, exercises and night time splinting is important to get the best possible result and prevent recurrence. It is often helpful to wear a splint while sleeping for several months after surgery.

What can a doctor do to help?
- Confirm that this indeed is the problem with your hand. Dupuytren's is sometimes confused with Trigger finger, which can result in bent fingers, but is an entirely different process.
- Prescribe therapy as above.
- Perform surgery to remove the abnormal tissue, usually through zig-zag cuts in the palm. Surgery may require skin grafts or other tricks to correct the tightness of the skin of the palm. Surgery is usually recommended to help straighten out bent fingers rather than to prevent the fingers from becoming bent. A variation of surgery is a minimally invasive procedure referred to as a Needle Aponeurotomy. In this procedure, the abnormal tissue is weakened using a small needle in the palm. Needle Aponeurotomy is most effective for disease in the palm of the hand,
but can be used in certain cases of finger contractures.

- A variety of medications have been tried over the years, including colchicine, verapamil, cortisone and collagenase (FDA approval pending), but a medical cure is not yet available.

**How successful is treatment?**

- It depends on how bad the problem is, as well as the person's age, sex, and other medical problems.
- Most people who have had surgery for Dupuytren's feel that they made the right choice to have surgery.
- Taking all comers, most people who have surgery for Dupuytren's contracture will have similar problems later on - either developing elsewhere in the hand or coming back in the area of previous surgery. Dupuytren's is a chronic, recurrent disease.

Here are some practical points which are considered in choosing the best treatment:

The **worse** the contracture, the less likely treatment will result in a full correction, but treatment is always possible.

The outlook depends on which joints are involved. Doctors use specific words to indicate specific joints: The **distal interphalangeal**, or **D.I.P.** joint is the end finger joint. The **proximal interphalangeal**, or **P.I.P.** joint is the knuckle in the middle of the finger. The **metacarpophalangeal**, or **M.C.P.** joints are the big knuckles that you see on the back of your hand when you make a fist - the knuckles in a "knuckle sandwich"

Contractures which only affect the MCP joint are most predictably helped by either needle aponeurotomy or surgery.
Contractures which only affect the PIP joint are the most likely to recur after treatment, especially in the pinky finger. They may be treated with either needle aponeurotomy or surgery.

Contractures which affect both the MCP and PIP joints actually have a better outlook than isolated PIP contractures. They may be treated with either needle aponeurotomy or surgery.

Contractures which affect both the PIP and DIP joints have a similar outlook as combined contractures - unless the finger develops a backwards bend of the DIP joint - called a "boutonniere" deformity. Boutonniere deformity fromDupuytren's has a higher recurrence rate than other patterns of involvement. This may be treated with either needle aponeurotomy or surgery.

Contractures due to well defined cords - which feel like a thick string under the skin - are usually good candidates for either needle aponeurotomy or surgery. When there is not a clear cord, but a general tightness, it is referred to as diffuse disease. Needle procedures may not be possible in some cases of diffuse disease, and the most appropriate treatment may involve skin grafting.
Usually, the skin near a cord is nearly as soft as skin in unaffected areas of the palm. Sometimes the skin is hard or leathery over a wide area, referred to as *tethered skin*. If this is so, needle aponeurotomy may or may not be possible, and the most appropriate treatment may involve skin grafting.

If Dupuytren's recurs in areas of previous surgery, it is common to have diffuse disease, tethering, or both problems. If so, needle aponeurotomy may or may not be possible, and the most appropriate treatment may involve skin grafting.
Dupuytren's is a progressive process, in which the palmar fascia changes and shrinks the same way that scar tissue does. If nothing is done and this really is Dupuytren's disease it never gets better.

When there is a *composite contracture* involving two joints, one joint can straighten when next joint is bent, but both can't be straightened at the same time. *Needle Aponeurotomy* works best for either composite contractures or those which primarily involve the Metacarpophalangeal (MCP) joint, where the finger joins the hand.
**Fixed contractures** can't be straightened beyond a certain point no matter how the adjacent joints are moved. Fixed contractures of the metacarpophalangeal (MCP) joint are more likely to be corrected than those involving the proximal interphalangeal (PIP) joint, regardless of the type of treatment.

How far advanced is the contracture? It really depends on the combined involvement of all joints. A practical approach is to add together the angles of both the MCP and PIP joints. This works whether the problem involves composite or fixed contractures.

Using this approach, contractures from Dupuytren's may be placed into a *stage* of 0-5. In stage 0, when the palm of the hand is placed against a flat surface, the fingertip can still be lifted up from touching the same surface. Treatment is not usually recommended for stage 0 Dupuytren's disease.

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**What happens if you have no treatment?**

- It's unpredictable, but it generally does not get better on its own.
- Some people will notice a lump or a line of tightness in the skin of the palm, and never develop a worse problem - probably best to leave alone. Others will have a progressive bending of their fingers.
- For example, people who first notice the problem in their forties are likely to have more trouble overall than those whose problem first show up in their seventies - in terms of how badly the fingers curl, how likely the problem is to recur after surgery, and so on.
- The longer joints have been bent before surgery and the more bent they are before surgery, the less chance that surgery will get them fully straight.

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[Click here to see pictures of real hands with Dupuytren's contracture](#)

- Click here for before and after pictures of Needle Aponeurotomy for Dupuytren's
- Click here to search the web for Dupuytren’s Contracture
- American Society for Surgery of the Hand Patient Education Brochure: Dupuytren's Disease
- Dupuytren Society