What is Dupuytren’s disease?

Dupuytren’s (DOOP-uh-trenz) disease is abnormal thickening of the fascial tissue in the palm and/or fingers that progressively limits finger motion. Individuals with Dupuytren’s disease may first notice dimples or small bumps in their palms. As the disease progresses, the thickened tissue forms a cord that tightens and pulls the finger(s) into the palm. The cord does not allow the finger(s) to fully straighten, this is called Dupuytren’s Contracture.

What causes Dupuytren’s disease?

The exact cause is unknown, but there is a genetic component. There is no evidence to suggest injury or occupation is a direct cause of the disease, though there is a higher incidence in high-level rock climbers. Dupuytren’s disease does tend to be more common in people with a history of diabetes, alcoholism, epilepsy, smoking, and those of Northern European descent. It is also more common in men than in women.

How is Dupuytren’s disease diagnosed?

Your provider will take a detailed health history and perform a physical evaluation. Unless tests are needed to rule out other medical problems, X-ray or MRI are usually not needed to diagnose Dupuytren’s disease.

What is the treatment for Dupuytren’s disease?

Treatment is recommended when contracture of the fingers is interfering with daily functional use of the hand. There are currently two options for treating Dupuytren’s contracture – surgery or Xiaflex™ injections. Your hand surgeon can help you determine the best treatment for you.

Signs and Symptoms

The severity of Dupuytren’s disease can vary considerably and progression is unpredictable.

- Initial symptoms include firm lumps and/or pits in the palm of the hand. Lumps may be tender at first, but this tenderness usually goes away.
- Thick cords may form from the palm into one or more fingers. As the cords tighten, it becomes more and more difficult to straighten the fingers.
- Activities such as laying your hand flat on a table, putting on gloves, putting your hands into pockets, and shaking hands may become increasingly difficult as the disease progresses.
Dupuytren’s Disease

**Surgery** – involves removing the diseased fascia from the hand/fingers and releasing any contracted joints in the operating room. Incisions are usually left open, without stitches, so wounds can heal without excessive stress. The wounds will heal on their own in about 3-4 weeks.

Immediately after surgery, you will be placed in a bulky dressing. This dressing must stay on until your first post-op appointment. Keep your dressing clean and dry to minimize the risk of infection.

**Xiaflex™** – is a medication containing enzymes (collagenase) injected directly into the cord. These enzymes weaken the structure of the cord allowing your hand surgeon to manipulate and “break” the cord, which releases the contracture.

This treatment involves two appointments; one to have the injection, and the second occurs 1-2 days after injection to manipulate the cord. Your finger will be straighter, but any lumps or bumps will remain.

Common side effects following Xiaflex™ injection usually resolve in about 4 weeks, and may include one or more of the following:

- Swelling, bruising, and pain in the treated hand and finger(s)
- Pain in the arm pit of the injected side
- Itching and/or redness of the skin
- Breaks in the skin during manipulation, causing a wound

**What are the possible risks and complications of treatment?**

Treatment will not cure Dupuytren’s disease. The goal of treatment is to release joint contracture(s) to improve hand function and range of motion. Contractures may return despite treatment, or different areas of the hand or fingers may become involved.

Risks of treatment may include damage to nerves or blood vessels, incomplete resolution of symptoms, or infection. Discuss the risks and benefits of surgery or injection with your hand surgeon.

**What happens after surgery or injection?**

Following your procedure, you will be referred to Hand Therapy. If you had an injection, your hand therapy appointment will be immediately after your finger(s) have been manipulated by your hand surgeon. If you had surgery, this appointment is scheduled 2-3 days after surgery.

**What will hand therapy do?**

Post-operative or post-injection hand therapy is a very important part of your recovery. Hand therapy will help you to regain motion and function.

Your hand therapist will make you a custom splint to help maintain motion achieved with treatment, instruct you on range of motion exercises, and help you manage swelling. If you have a wound, they will also instruct you in appropriate wound care and scar management.
The number of hand therapy appointments you need will depend on whether you have wounds and how quickly you regain range of motion. Your hand therapist can give you a better idea of how many therapy sessions you may need during your first appointment.

Managing pain and swelling
It is not unusual to have some level of pain and swelling following surgery or injection. Here are some suggestions to help you following your procedure:

**Elevation** – keep your hand and arm elevated above your heart the first several days after your procedure to help minimize swelling. This will also help to decrease pain.

**Ice** – can be used 3-4x/day to help manage pain and swelling. Use a cold pack or a bag of crushed ice for 15-20 minutes at a time. Use a damp cloth between your skin and the ice pack to prevent a cold injury.

**For your safety**... Do not use ice on your hand until it has “woken up” from anesthesia.

**Medication** – such as aspirin, acetaminophen (Tylenol), ibuprofen (Advil), or naproxen (Aleve) may help alleviate pain. In some cases, your doctor may prescribe other pain medication. Take your medication as instructed to help minimize your pain.

**Motion** – It is okay to move any joints that are not included in your dressing or splint. Movement may be uncomfortable at first, but it will help reduce swelling and pain.

What about returning to my usual activities?
Following your procedure, you may resume your daily routine within the dressing or splint as you feel comfortable. This includes light exercise such as walking, or other light activity such as using a computer.

You must keep your dressings clean and dry. Your doctor will instruct you on when you can return to work and/or sports.

What about eating and drinking?
Drink plenty of water and eat nutritious meals to give you energy and help your body’s healing power. Start with light meals and resume your regular diet as you feel comfortable. If you are taking prescription pain medication, do not drink alcohol.

Can I get my hand wet?
If you had surgery or have open wounds following Xiaflex™ injection, you will need to put a plastic bag over your hand and keep your bandages dry when showering or bathing. This helps reduce the risk of infection. Your doctor or therapist will instruct you when it is safe to get your hand wet in the shower or bath.

What about driving?
You must discontinue all prescription pain medication before driving. In general, we recommend you wait to drive until you feel comfortable with the mobility of your hand and have stopped taking any prescription pain medications.
Notes:

Additional resources for information on Dupuytren’s Disease

- American Society for Surgery of the Hand – assh.org
- American Academy of Orthopaedic Surgeons – aaos.org or orthoinfo.org

The content provided here is not intended to be a substitute for professional medical advice, diagnosis or treatment. Always seek the advice of your physician or another qualified health provider with any questions you may have regarding a medical condition.