

What is Dupuytrens Disease?

Dupuytren's contracture is a fibrotic contraction of the tissue in the palm of the hands, fingers and sole of the feet. The purpose of this leaflet is to explain why it happens, and what can be done to relieve your symptoms.

There is a common misconception that the condition involves the tendons of the hand. The condition is due to a fibrosis of the palmar fascia. This is the tissue just beneath the skin in the palm and fingers. It is a common condition occurring in the fifth and the seventh decades of life. It is more common in men (2-7:1) and is common in those of Caucasian descent especially those of Celtic origin. It is uncommon in persons of colour.

Predisposing Factors include the following:

Family History High cholesterol and triglycerides Epilepsy Diabetes Alcohol abuse (28% vs 8%) Heart disease Alcoholic Liver disease Pulmonary disease Thyroid problems Cigarette smoking

What are the symptoms?

Although any of the above conditions may be present, most cases have no known cause. It commonly involves the right hand and most commonly affects the ring finger then little, middle, index and less commonly the thumb. The prognosis is worse if you:

Are younger Have Bouchards nodes Have it in both hands (bilateral) Have it in both feet Have a family history Are suffering from Peyronies

Your General Practitioner may diagnose this condition if you have the symptoms of gradual contraction of the fingers into the palm.

The signs of Dupuytren's disease include swellings in the palm, pits in the skin, and taught bands in the skin causing prevention of straightening of the fingers. Bent finger joints make it difficult to put on gloves, wash and shave. The GP will refer you when you no longer can get your hand flat on a table.



Figure 1 Unable to get your hand flat?

What tests will you need?

There are few tests you will need unless your consultant thinks the disease might be related to liver disease or diabetes. Then you might have to have a blood test to estimate the severity of disease and clotting studies as clotting is affected by liver disease.

I think I might have it. What should I do?

If you think you have Dupuytrens and want to see one of our hand consultants to confirm your suspicion telephone Jane our practice manager to make an appointment **0044** (0)**117 3171796**



How is it treated?

Mild cases may be treated by non-surgical methods. If you can get your hand flat on a flat surface there is no need for surgery. Exception to this occurs in drivers who are troubled by a lump in the hand when holding a steering wheel. The risks are progression of the disease. The risks of leaving the contractures for too long are that the operation is difficult, it may have to be accomplished in two stages and complete straightening of joint contractures are sometimes not possible.

A new alternative to surgery is to have each Dupuytren's band dissolved using Xiapex[®]. While this seems an attractive option the risks and recurrence rate are high.

Once you can no longer get your hand flat on the table it is time to ask for a referral for an opinion or surgery. The surgeon who does this at SOC is Mr Phil McCann <u>Upper Limb Surgeon</u>.

Would the surgeon offer to do both hands at the same time?

It is highly unlikely that any of the surgeons at SOC would offer this, except in the circumstances where the patient has an understanding carer who would help with toileting for one to two weeks after surgery.

How do I prepare for surgery?

Please make arrangements to be accompanied home by a responsible adult after surgery. Do not eat or drink anything after midnight the night before the procedure unless you are instructed otherwise. Wash your arm the night before surgery and do not apply hand creams. Your operation will take place in the most modern facility by a trained Consultant Surgeon who will explain each step of the procedure to you as it takes place.

At surgery local anaesthesia injected into the wrist and hand so you don't feel pain after surgery. The procedure is performed under anaesthesia. Occasionally your surgeon will offer you a relatively new procedure called "Aponeurotomy". Otherwise the best treatment is "Fasciectomy" for this condition. After skin preparation and draping a tourniquet is inflated around your upper arm to reduce bleeding during the operation.

An incision is made down the fingers and palm to carefully excise the diseased tissue from the nerves and vessels. The skin is then closed with sutures and the wounds are dressed.

If you leave the fixed flexion too late like this it is much more difficult for you and your surgeon to recover a straight normal finger.



What are the benefits and risks?

Figure 2 Percutaneous needle aponeurotomy

The benefit is to halt the progress of joint contraction in your hand and fingers and restore the normal function. Pre-existing symptoms of permanent contracture of 45-90 degrees may not be relieved by surgery even over time because of contracture of the volar plate.

There may be bleeding. This often settles with elevation.

Infection occurs in an average of 6% of patients because we all have bacteria on our skin and if these bacteria get into the cut they can multiply to produce infection. Infection can be surmised if you develop more severe pain after the first 24 hours. In these circumstances please contact your GP or surgeon immediately. Your surgeon will arrange to assess this and probably remove the sutures early to relieve pain and resolve the infection.

Nerve damage should only very rarely occur. It is usually if the nerve is well wrapped up by the Dupuytren's tissue and it is disturbed by the unwrapping of the tissue surrounding the nerve. Nerve injury usually resolves with time.

You may be given pain relief medications. Dark blue or brown discoloration of the hand and wrist after surgery is normal and due to bruising. You will be told about exercising your hand by opening and closing your fingers and squeezing exercises.

Persistent joint contracture after surgery is common depending on the preoperative contracture. If necessary we will arrange for our physiotherapists to make a night splint for you to improve the straightening of the fingers overnight. If you develop a pale blue or white hand, increasing pain for more than a few hours not relieved by medication, loss of sensation, throbbing, excessive swelling in the hand, or fever over 100 ° F please contact your doctor or surgeon.

What about after surgery?

Immediately after surgery your hand will be bandaged and will be kept elevated to keep the swelling down. You should maintain the elevation after you are taken home. It is helpful to keep the wound covered and dry for the first week after surgery. SOC Consultants recommend <u>waterproof cast</u> <u>protectors from BLOCCS</u> the British company to keep the dressing dry when bathing or showering.

Keeping it elevated to keep the swelling down is best along the back of a sofa so the elbow and shoulder are in line and the veins unkinked.

You will probably be able to start light activities in one to two weeks. We will arrange physiotherapy and follow-up appointments with your surgeon so that we can make sure you are healing properly after surgery.

Avoid bending your wrist far forward or backward, and try not to bump the area around the sutures.

We will arrange follow-up appointments so that we can remove your sutures and make sure you are healing properly after surgery. The standard with us is for three appointments after your operation.

How long will it take to...

- be pain free? Be sure you take an anti-inflammatory type painkiller in the first few hours after operation, as your local anaesthetic will not last long. Pain can take 6 weeks to settle.
- get the dressing off? Leave the dressing and sticking plaster until you have your sutures removed between 7 and 14 days after operation. Be sure you have made arrangements with me to have your sutures removed between 7 and 14 days after operation. Do not worry about any dried blood on the sticking plaster. Do not get the dressing wet until the sutures are removed.
- find the scars are comfortable? After your scars have healed and the scabs are off please massage it regularly with hand cream so that the scar is desensitised and softened.
- begin driving again? You should be able to return to driving after about 14 days.
- return to work? This might take longer than a few weeks depending on the type of work you do.