

Duypuytren's Disease

Patient Information



What is Duypuytren's Disease?

Duypuytren's disease is a problem that affects the hands of adults causing permanent bending of the fingers so that they cannot be straightened out any more. It commonly affects the ring and little fingers but can affect any including the thumb. It is more common in men and as they get older. The affected fingers tend to bend more and more. In some people this bending comes on over a few months, in others it takes years. There is usually a thick cord of hard, scar-like tissue under the skin of the finger, which passes down into the palm of the hand. There may be nodules in the palm and also little pits in the skin of the palm. There may also be thickening on the back of the knuckles. Rarely, it may affect the soles of the feet and (very rarely) the penis. Fixed bending of the finger is known as a "flexion contracture". Simply having a bit of Duypuytren's tissue in the hand is not a reason for surgery. The condition itself is not dangerous; the fingers just get in the way when the contractures start to get bad. Most people can do all they would wish with mild contractures. If

the contractures are causing the finger to get in the way, or the hand cannot be placed flat on a table top, then surgery may be recommended. Surgery is the only proven treatment. If the disease comes on at a younger age, involves the index finger and thumb, or the feet and penis, or runs in the family, it tends to be more severe and may return after surgical treatment.

Surgery is technically more difficult if the contracture bends the finger to 90° and the outcome of the treatment is less predictable. This is because the Duypuytren's tissue wraps itself around the little (1mm) nerves and arteries of the finger and it becomes difficult to separate them. Also, the nerves, arteries and the skin become short on the front of the finger. So, we like to do an operation to straighten the finger when you are having problems with the contracture but before it becomes really severe.

What Causes Duypuytren's Disease?

No one is really exactly sure why some people get Duypuytren's disease. Part of the sto-

ry is definitely due to a hereditary factor. It seems to be related to having Viking ancestry a long time ago. There are also associations with smoking, alcohol and diabetes. It does not appear to be work-related.

Surgery for Duypuytren's Disease

This may be done as a day case operation. That means you will normally only have to be in the hospital for half a day and not over night. You will need a responsible adult to pick you up after your surgery and not drive to the hospital yourself. Sometimes, people are admitted to the hospital over night. This is usually planned before the surgery and may be for medical or social reasons or if the surgery is extensive, taking 1-2 hours. The surgery is normally carried out under a general anaesthetic with you asleep. You will be given a gown to wear on the ward before the operation is carried out. It is recommended that you wash your hands with soap and water before the operation. Make sure your nails are clean. One of several types of operation may be per-

formed depending on how bad the contracture is, where it is, how many fingers are affected and how good your general medical fitness is.

- 1) Fasciotomy. This is often done under local anaesthetic for less severe contractures mainly affecting the palm. The thick cord is just cut in the palm through a small incision.
- 2) Fasciectomy. This is the most common operation and involves opening up the finger and cutting out the abnormal Dupuytren's tissue. The scar is usually a zig-zag.
- 3) Dermofasciectomy. This is performed for severe disease or if the contracture returns. It involves cutting out the Dupuytren's tissue as well as the skin over the top if it. This is replaced with a skin graft, usually taken from the forearm.



Fig 2. Site of the surgical scar

- 4) Open Palm Technique. If several fingers are badly affected, there may not be enough skin left at the end of the operation to stitch up the palm. The wound is left open with dressings and heals itself in over the next month.
- 5) Finger Amputation. This is not commonly performed for Dupuytren's these days. However, if the disease keeps returning, is very severe or if you are severely troubled but can't medically cope with a long operation it may be recommended.

After the Operation

You will find that there is a large bandage on your hand. There may be a plaster cast keeping the fingers straight. Keep your hand elevated at head level to reduce swelling. The heavy bandage will be removed after 2-3 days to allow you to move the fingers. You will have a plastic splint made to keep the fingers straight at night. This must be worn for at least 3 months (night only) after the surgery. The stitches should be kept clean and dry. They will be removed 10-14 days after the surgery and you will be asked to start massaging the scar with a moisturiser. You may get back to driving after 2-3 weeks and can consider going back to work 6-12 weeks after surgery, or earlier, depending on your job. You need to discuss this with your surgeon.

Risks of Surgery

Usually surgery is successful but this may be a technically difficult operation and there are some possible complications of surgery that you should know about. Stiffness and swelling of the fingers is com-

mon. Keeping the fingers well elevated and moving them early tends to limit this. Rarely, severe swelling and stiffness occurs which does not quickly settle. This is called reflex sympathetic dystrophy and requires protracted therapy to settle. It is not possible in all cases to obtain a completely straight finger at surgery. It is better to have a slightly bent finger that flexes all the way to the palm than an absolutely straight finger that does not move. In a proportion of cases the contracture returns even after a good initial correction. This is the nature of the disease and sometimes repeat surgery is necessary to straighten the finger again. Infection is uncommon but does occasionally occur. It settles well with antibiotics. The tips of the zig-zags occasionally die off but tend to then heal in. Occasionally grafts for a dermofasciectomy fail to heal. The small arteries and nerves of the fingers are vulnerable to injury whilst being picked out of the Dupuytren's tissue. Damage to one artery does not have any effect but cutting a small nerve may cause some loss of feeling on one

side of the finger even if repaired. Even when the arteries and nerves are not damaged a proportion of patients have slightly less fingertip feeling than before. This may settle with time. Some patients have cold-intolerance of the finger. Very occasionally, patients who have two joints contracted to 90° lose the blood-flow to the finger after surgery. This may require amputation of the finger.

One-Handed Living

Do not forget that you will not be able to use the hand that has been operated on fully for a short while after surgery. Make life easy for yourself at home by planning ahead, particularly if you are alone at home or if you will be alone at home for long periods in the day. Get enough shopping in to last for a week or two after your surgery, as you will not be able to drive. Loosen the tight caps of jars (but don't forget the contents will go off more quickly). Ready-meals might be useful for a few days after surgery or do some cooking before and freeze it. Wear slip-on shoes so you don't have to tie laces etc.