



**SURGERY**

## Dupuytren's Surgery

*The aim of Dupuytren's surgery is to improve the function of the affected hand. The options vary in how invasive they are and therefore how much time and effort you have to put in to get good function back in the hand after the procedure. Broadly speaking less invasive options are easier to recover from but the disease will be more likely to come back and more invasive options are more work in the short term but have a lower (but still significant) risk of the disease recurring.*

### What does this involve?

The aims of Dupuytren's surgery are:

- To straighten out the affected fingers
- To avoid complications/ unwanted side effects
- To minimise the risk of the disease coming back

The options include:

- Fasciotomy - the cords of fibrous tissue are divided in the palm. This can be done with a small cut or the sharp point of a needle.
- Fasciectomy - removing as much of the fibrous cord as possible but preserving the skin
- Dermofasciectomy – removing the fibrous cord and some of the overlying skin. The skin is then replaced with a skin graft from elsewhere

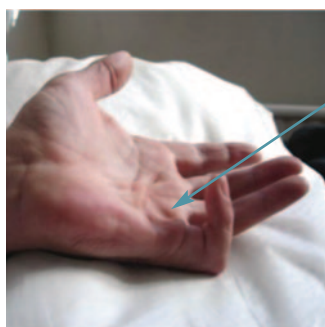
### When is this surgery needed?

Dupuytren's disease interferes with how your hand functions and is a nuisance but surgery is never absolutely required. The contracture tends to gradually increase over time. Some people have more aggressive disease than others. Some joints get stiffer than others if they are kept bent for a long time.

The type of operation to choose and when to go ahead with the operation is an entirely individual

choice for you to make after a discussion with your surgeon. The decision is based around how you feel about the surgical risks, how much trouble you find your contracture, how aggressive your disease is and technical factors, such as how easy it is to straighten out each affected joint after the Dupuytren's tissue has been removed.

### Dupuytren's cord pulling in the little finger



Thick cord in the finger and palm

	<b>Fasciotomy (cut)</b>	<b>Fasciectomy</b>	<b>Dermofasciectomy</b>
<b>Type of Operation</b>	Day case, in theatre	Day case, in theatre	Day case, in theatre
<b>Length of Procedure</b>	5 mins	About 45 mins per finger	About 1 hour per finger
<b>Type of Anaesthesia</b>	Local	Regional or General	Regional or General



## What are the main risks of these procedures?

### *Swelling, Stiffness and Scar pain*

These problems are much less for fasciotomy than for a fasciectomy or dermofasciectomy, but even the smaller procedures can be uncomfortable afterwards. Painkillers, elevation, early mobilisation and scar massage are useful. Specialist hand therapy is often recommended to get the best possible results.

Occasionally patients are troubled by more swelling and stiffness than average. In this case complex regional pain syndrome (CRPS) is sometimes the cause (see information sheet in 'Conditions we Treat').

1 – 2 patients per 100 treated may have some degree of this extra stiffness which does slow recovery of function.

### *Wound Healing Problems*

These are more frequent with the more involved procedures but most will only require dressings for a little longer, sometimes coupled with a course of antibiotics. Very rarely will more surgery be required.

2-3 patients per 100 treated may have some degree of wound healing problems which does slow recovery of function.

### *Infection*

Again this complication occurs more frequently with the more complex procedures but most can still just be treated with a course of antibiotics. Very rarely further surgery, or even admission to hospital for antibiotics into the vein are required.

3-4 patients per 100 treated may have some degree of wound infection which may slow recovery of function.

### *Nerve Injury*

A small nerve runs down each side of each finger. These nerves are often intertwined with the Dupuytren's disease and have to be very carefully freed up to get out the fibrous cord. This can cause temporary or permanent loss of sensation on one or both sides of the end of the finger.

The likelihood of this complication is again related to complexity of the surgery undertaken. For fasciectomy about 1 in 5 patients operated on will have a temporary change in finger sensation, with the loss being permanent in about 8 in 100 patients operated on.

### *Blood Vessel Injury*

There are two arteries for each finger that run with the nerves. The finger will often look normal if just one artery is working but will become cold and blue if both arteries are damaged. Without enough blood getting through the finger will die.

This is a very rare complication following Dupuytren's surgery, except for the most complex procedures. Slight impairment of the blood flow is commoner and can occur in up to 5 patients in 100 operated on.

You should urgently re-attend your surgical centre or local Accident and Emergency department if you feel the blood supply to your operated finger is poor.

### *Incomplete correction of the deformity*

This depends on which joint of the finger is bent and how bent it is to start with. Metacarpophalangeal joints (the knuckle joint) usually straighten well, interphalangeal joints (the ones in the finger itself) are more difficult to fully straighten. If your finger is very bent to start with it would be more reasonable to expect a significant improvement in the shape of your finger, not a completely normal range of motion, after surgery. Your surgeon will discuss your particular case with you.

### *Recurrence of the disease*

The percentage of patients with a recurrence gradually increases as the months and years pass after surgery. The rate of recurrence is less for the more complex procedures. Only about half the patients who have a recurrence eventually request further surgery.

Recurrence is common. 3-5 years after surgery an estimate of recurrence rates would be about 6 in 10 for fasciotomy, 3 in 10 for fasciectomy and 1 in 10 for dermofasciectomy.

### *Tendon Rupture*

This complication has been very rarely reported for fasciotomy, but not from open surgery (fasciectomy/dermofasciectomy).



## Post Operative Course – Fasciotomy – Needle/cut

### Day 1

- Dupuytren's cord divided in the palm under local anaesthetic
- Finger straightened manually
- Light dressing applied to the hand for a few days.
- Stretches to be performed regularly to maintain improvement gained
- Might be painful that evening - take painkillers as necessary

### 4 – 6 weeks

- Clinic review with surgeon to review progress/outcome.

## Post Operative Course – Fasciectomy/Dermofasciectomy

### Day 1 – 7

- A dressing and padded bandage with a plaster cast incorporated is applied after the operation to the tips of the operated fingers
- Keep the dressings clean and dry
- Keep the arm strictly elevated in a sling or on pillows to reduce swelling
- You can start movements of any non-immobilised joints immediately
- Take painkillers before the anaesthetic wears off and as necessary thereafter

### Day 5 – 7

- An appointment will be made for you to see the Hand Therapist. They will make you a removable splint and start your rehabilitation (see Dupuytren's Rehabilitation sheet)

### Day 10 – 14

- The stitches will be removed – in clinic or with your GP practice nurse
- Rehabilitation will continue with the Hand Therapy team.

### Six to Eight Weeks

- Further review in clinic with your surgeon
- Most people are back to using the hand for normal light activities by this stage but you may still find scar massage helpful.

### Three Months

- Contact sports and heavy loading can usually be undertaken again by this stage

### Plaster Cast Information

Contact your surgical centre if:

- Your fingers become blue, swollen or numb and tingling with a plaster cast in place
- You see any discharge, wetness or detect any unpleasant smells from around your cast
- The cast becomes cracked, soft, loose or uncomfortable.

Outside normal working hours you may need to attend your local Accident and Emergency Department for help with these issues.

### Driving

You may drive when you feel confident to control the car, even in an emergency.

This maybe in just 2 or 3 days for a fasciotomy but could be 6 to 8 weeks for the bigger operations. This will depend on your progress and should be discussed with your therapist.

### Time off Work

This will vary depending on the nature of your job and the procedure you have performed. You can discuss your individual requirements with your surgeon.

Sick notes can be provided on the day of your operation, at your clinic visits and by your own GP.