

# Surgical treatment for Dupuytren's disease

## Hand Surgery Patient Information Leaflet

### Introduction

This leaflet is for people who have been diagnosed with Dupuytren's disease and who are considering surgical treatment for this disease. It explains what this involves, how it works and the benefits and risks of the treatment.

### What is Dupuytren's disease?

Dupuytren's disease is a condition that affects the connective tissue in the palms of your hands (known medically as palmar and digital fascia). It is a progressive disease which means that the symptoms tend to increase over time and these may come back even after treatment.

## What are the symptoms?

It can first appear as small lumps under the skin in the palm of the hand which are non-cancerous (these are known as Dupuytren's nodules). The lumps contain collagen which is a natural protein found in the body. Collagen builds up under the skin forming string-like cords which extend from the palm into the fingers. These can be felt or seen under the skin when you stretch out your finger.

Over time, this cord tightens and pulls your finger in towards the palm of your hand. This is known as Dupuytren's contracture and makes it very difficult to straighten your finger fully. Although this is not usually painful, it can cause problems with carrying out normal activities.

The ring finger and little finger are most commonly affected but Dupuytren's contracture may develop in more than one finger and in both hands. Collagen nodules can also appear in soles of feet (Ledderhose's disease) or back of the fingers (Garrod's pads).

## How can it be treated?

At the moment there is no cure for Dupuytren's disease but your finger can be straightened. Your consultant will discuss the various treatment options with you and you can decide which of these you prefer.

The aim of treatment is to allow your hand to work normally again and try to limit the disease from progressing. However, whatever treatment option you choose, it is possible that the symptoms may come back and need more treatment.

The treatment options include both surgical and non-surgical treatments and your consultant will have discussed all the options with you.

If you have a mild version of the disease and do not have a contracture, your consultant may recommend that you do not need any treatment. They will continue to monitor your condition instead. This is because even if you have treatment, there is no guarantee that this will prevent the disease from progressing any further.

# What surgical treatments are there?

## Fasciotomy

This involves dividing the cord through a cut in the skin or with a needle puncture through the skin.

### Percutaneous needle fasciotomy

For this type of fasciotomy, a special needle is passed through the skin of the palm into the cord. A cut is made into the cord using a see-saw movement to divide it and the finger is stretched to straighten it.

The procedure is usually carried out in the outpatient clinic. You will be given a local anaesthetic. Afterwards, a light dressing will be applied. You will be advised to keep your hand elevated (raised above the level of your heart) and to move the finger that has been treated.

You will need hand therapy to help your hand recover its normal functions.

This type of surgery has a quicker recovery time and the scar is smaller than for other types of surgery for Dupuytren's disease. However, there is a 62 per cent chance, on average, that patients will develop another contracture after this type of surgery within about four years.

### Palmar fasciectomy

For this procedure, the whole cord or part of it (limited fasciectomy) is removed rather than just divided. The skin wound is then stitched up and dressed.

The treatment may be carried out using a local or a general anaesthetic, depending on what you are having done. You should only need to be in hospital for the day but occasionally an overnight stay may be necessary.

You will need to return for removal of stitches, dressings and a check-up for a few weeks after surgery. You will need hand therapy to help your hand recover its normal functions.

## What is involved in the treatment?

The surgeon will discuss the options with you in more detail as the type of surgery will depend on your individual condition. The options for surgery are as follows:

### Segmental fasciectomy

The surgeon will remove short segments of the cord through one or more small incisions (cuts) in your hand.

### Open partial fasciectomy

The surgeon will take out the whole cord through one longer cut in your hand. This is the most common operation to be used. The wound can be treated in several ways:

- Simple closure using stitches
- Open palm technique where the wound is left to heal by itself without stitches. It usually takes about three to five weeks to heal
- Sometimes, in cases where skin is attached to the cord and therefore also has to be removed, a skin graft from the upper arm or inner thigh is used to seal the wound

### Dermofasciectomy

The surgeon will remove the whole cord as well as the skin over it. This skin will be replaced with a skin graft that is usually taken from the upper arm or inner thigh. This procedure is usually only used in people who have a more severe form of the disease where the symptoms keep coming back.

With this form of surgery, you are likely to need hand therapy for longer to recover movement in your hand than for the other surgical options.

With palmar fasciectomy surgery, on average four in every 10 people find that the symptoms come back within about four years, depending on the patient's disease type and the exact surgical technique.

## What happens after the treatment?

You will be given a follow-up appointment to see the hand therapy team. You will need to return to hospital about 10 to 14 days after the operation to have the stitches removed and will be given an appointment for this.

## Hand therapy

At your first hand therapy appointment, you will be given a splint to wear on your finger at bedtime. You will need to use this for up to four months. You will also be given some finger exercises to do each day.

Please note that you will need to attend hand therapy appointments for treatment until your hand function is normal again.

## What are the benefits of the treatment?

Research with people who have had surgery for Dupuytren's disease has shown that the treatment has been successful in straightening the bent finger(s), in most cases. In addition, all affected areas of the hand can be treated at the same time.

## What are the risks?

As with all procedures, this treatment carries some risks and complications. It is important that we tell you about these risks so that you have the information you need to make a decision about the treatment. Studies have shown that about 20 per cent of people having either fasciotomy or fasciectomy surgical will have a side effect (that is about one in every 5 people).

Common risks experienced by most patients are:

- Pain for which you can take pain relief such as paracetamol (always read the label and do not exceed the recommended dose)
- Temporary loss of sensation (feeling) in the hand (about one in every 10 patients gets this)
- Damage to skin

Less common risks are:

- Scarring – everyone will have a scar but some scars can be unpredictable. They may become thick, tight and at times painful and tender
- Swelling of the hand
- Blood blister
- Stiffness in hand and finger joints
- Infection
- Damage to tendons, nerves, arteries
- There is an increased risk of damage to the nerves and blood vessels during operations for recurrent contractures, resulting in permanent loss of sensation (feeling), problems in wound healing and possible finger loss requiring amputation
- If skin grafts are used, these may not take
- Long period of hand therapy and recovery
- May trigger a Dupuytren's contracture of other fingers on the same hand after surgery
- Rarely, pain (particularly a 'burning' type of pain), swelling and stiffness of the hand due to a poorly-understood condition called complex regional pain syndrome (CRPS)

## Frequently asked questions

### Will it hurt?

As with all surgery, you will have some pain afterwards but your consultant will give you information on pain relief.

### Will I need hand therapy afterwards?

You will see a hand therapist to give you advice about exercises and to give you a splint to rest your finger at night for four months. You will need to do finger exercises every day.

### When can I start using my hand normally again?

You will be able to carry out normal activities after your wounds have healed. As your finger has been straightened, you will have to avoid straining it for a while. Your consultant will let you know how long this will be.

### **When will I be able to go back to work?**

Your consultant will discuss this with you as it will depend on the type of work you do.

### **When will I be able to drive and operate machinery?**

You should check with your GP after the procedure to find out when it is safe for you to drive, ride a motorbike or operate machinery.

### **What would happen if I have no treatment?**

The contracture can get worse, pulling the finger in towards the palm and affecting movement in the involved finger. It can also restrict movement and grasp in other fingers.

### **Can I find out more?**

You can find out more from the following web link:

#### **The British Dupuytren's Society**

[http://www.dupuytren-society.org.uk/treatment/treatment\\_xiapex.html](http://www.dupuytren-society.org.uk/treatment/treatment_xiapex.html)

## **References**

Crean SM, Gerber RA, Le Graverand MP, Boyd DM and Cappelleri JC (2011). The efficacy and safety of fasciectomy and fasciotomy for Dupuytren's contracture in European patients: a structured review of published studies. *J Hand Surg Eur* 36(5): p396-407.

Peimer CA, Wilbrand S, Gerber RA, Chapman D and Szczypa PP (2015). Safety and tolerability of collagenase Clostridium histolyticum and fasciectomy for Dupuytren's contracture. *J Hand Surg Eur* 40(2): p141-149.

Van Rijssen AL and Werker PM (2012). Percutaneous needle fasciotomy for recurrent Dupuytren's disease. *J Hand Surg Am.* 37(9): p1820-1823.

If you have any questions, or if there is anything you do not understand about this leaflet, please contact:

Plastic surgery specialist nurses on 01384 456111 ext. 4547  
(9am to 5pm, Monday to Friday)

Russells Hall Hospital switchboard number: 01384 456111

**This leaflet can be downloaded or printed from:**

<http://dudleygroup.nhs.uk/services-and-wards/plastic-surgery/>

If you have any feedback on this patient information leaflet,  
please email [patient.information@dgh.nhs.uk](mailto:patient.information@dgh.nhs.uk)

**This leaflet can be made available in large print, audio version and in other languages, please call 0800 073 0510.**

للحصول على هذه النشرة بحجم أكبر، وعلى شكل إصدار صوتي و بلغات أخرى، الرجاء الاتصال بالرقم 08000730510.

此宣传单可提供大字版本、音频版本和其它语言版本，请拨打电话：0800 073 0510。

Ulotka dostępna jest również w dużym druku, wersji audio lub w innym języku. W tym celu zadzwoń pod numer 0800 073 0510.

ਇਹ ਪਰਚਾ ਵੱਡੇ ਅੱਖਰਾਂ, ਬੋਲ ਕੇ ਰੀਕਾਰਡ ਕੀਤਾ ਹੋਇਆ ਅਤੇ ਦੂਸਰੀਆਂ ਭਾਸ਼ਾਵਾਂ ਵਿਚ ਵੀ ਪ੍ਰਾਪਤ ਹੋ ਸਕਦਾ ਹੈ, 0800 073 0510 ਤੇ ਫੋਨ ਕਰੋ ਜੀ।

Aceasta brosură poate fi pusă la dispoziție tipărită cu caractere mari, versiune audio sau în alte limbi, pentru acest lucru va rugăm sunați la 0800 073 0510.

یہ کتابچہ آپ کو بڑے حروف کی لکھائی، سمعی صورت اور دیگر زبانوں میں مہیا کیا جا سکتا ہے۔ برائے مہربانی فون نمبر 08000730510 پر رابطہ کریں۔