

## Needle aponeurotomy

Your consultant has recommended this procedure as being a possible option for your Dupuytren's disease. This leaflet has been written to tell you about the needle aponeurotomy procedure, its potential risks and consequences, and what to expect before and following the procedure.

If you would like to see the procedure in detail, please watch our patient information video: [www.pulvertafthandcentre.org.uk/patient-information](http://www.pulvertafthandcentre.org.uk/patient-information)

### Procedure information

#### What is a needle aponeurotomy and why do I need this procedure?

Needle aponeurotomy (also called needle fasciotomy) is a technique which can be used to treat some people with the disease that bends their fingers (Dupuytren's disease). It is best suited for people who have a lengthways cord of hardened tissue affecting their fingers. It is not recommended if they have a lump of Dupuytren's tissue in the palm without any bending of the fingers. If you have had previous surgery to the same finger, it may not be possible to have a needle aponeurotomy.

#### What are the benefits of having a needle aponeurotomy?

You will have a few small puncture wounds in your hand and will not have the discomfort of a large wound. You will be able to resume your normal activities quickly, often within 2 days of the procedure.

#### What are the risks associated with this procedure?

The procedure is straightforward; however as with any procedure there is a small chance of side effects or complications such as:

- Infection. This is usually only around the puncture wound and settles with simple treatment. This occurs in about 1 in 100 cases.
- Injury to the tendons that bend the fingers. This also occurs in about 1 in 1000 cases.
- Damage to the nerve that gives you feeling along the side of the finger. This is a risk in all surgical treatments for Dupuytren's disease, because it is often wrapped closely around the tight cord, especially in the fingers. If this nerve is cut by the procedure, you will have permanent numbness along the side of the affected finger. This occurs in about 1 in 100 cases.
- A pain reaction may develop. This is a potential risk after any injury or operation on a hand. This means that the whole hand can hurt and swell. The pain reaction goes of its own accord but this can take many months. This happens in about 1 in 1500 cases.
- A small skin tear. This happens in about 4 in 100 cases.

Apart from tendon injury, the risks are the same or less following a needle aponeurotomy than following a surgical procedure for Dupuytren's disease.

If you are concerned about any of these risks, or have any further queries, please speak to your consultant.

This procedure will only be carried out with your consent and you will be asked to sign a consent form.

### **What are the consequences?**

Following this procedure it is common to have the lumps of the Dupuytren's left in the palm as we are not removing the whole of the Dupuytren's. The vast majority of these will soften over the next few months, but occasionally a small steroid injection into one or two of the lumps is required to promote further softening and removal of the Dupuytren's tissue.

Dupuytren's disease recurs whatever treatment is performed. Following a needle aponeurotomy it will have recurred in 6 out of 10 patients within 3 years and about 8 out of 10 patients within 5 years.

If the disease recurs the treatments that can be offered will depend on the condition of your hand, but it is often usual to perform a further needle aponeurotomy.

## **Instructions**

### **Do I need to do anything before coming to hospital for the procedure?**

No, you do not need to change your normal activities. You can eat and drink as usual.

### **Do I need to bring anything with me?**

For your appointment please bring with you, in clearly labelled containers, any tablets or medicines that you are currently taking. You may wish to bring something to read.

### **Which department will I attend?**

Please follow the instructions on your appointment letter.

### **How long can I expect to be at the hospital?**

The needle aponeurotomy procedure will take about 20 minutes, after which you may be referred to see hand therapist. Please expect to be in the hospital for about 3 hours.

This is a day case procedure and an overnight stay is not necessary.

### **What happens during the procedure?**

A small injection of local anaesthetic is used to numb the skin. This stings initially, but works rapidly. A needle is placed through the numb patch of skin and used to cut the tight Dupuytren's tissue. This will probably need to be done in a few different places along the cord to allow the finger to straighten.

### **What happens after the procedure?**

You will have a small dressing and may have a custom made plastic splint to wear during the day or at night. If you are having a splint fitted, the occupational therapist will provide you with advice on using your hand and maintaining the movement. You will be given instructions on how long you need to wear the splint for.

We recommend that you are accompanied to this appointment, as you will be unable to drive following the procedure.

Ambulance transport has not been arranged, however if you do require this, please contact your GP at least 48 hours before your appointment so that this can be organised for you.

### **Wound care**

Your hand may feel a little sore and bruised. Taking simple painkillers such as Paracetamol or an anti-inflammatory for the first 72 hours should be effective - follow the manufacturer's instructions and do not exceed the stated dose.

Keeping your hand up above heart level as much as possible, for example onto your shoulder, and applying ice packs is very helpful in settling bruising or swelling.

### **Do I have to keep the wound dry?**

Keep your wound dry while the dressing is in place.

### **When can I remove the dressing?**

If you have plasters on the wound, these can usually be removed after 24 - 48 hours. You can then wash your hand normally. We recommend that you use a good quality hand cream (containing Vitamin E) on your hand for a few weeks to soften the skin and to keep it in good condition.

If you have a larger dressing you will be advised in clinic when you need to have it changed or removed.

If you have had a small skin tear, you may need to attend your GP practice nurse for new dressings for 10 - 14 days.

### **Signs of infection**

If your wound becomes very sore, hot to touch, red or oozing contact your GP as soon as possible as you may have an infection.

Approximately 6 weeks after the procedure, you may find that the hand becomes swollen and red (this occurs in 20 - 25% of patients). Non-steroid anti-inflammatory drugs such as Ibuprofen will usually help make this better.

### **Can I resume normal activities straight away?**

Most people can return to normal activities within 2 days.

You should be able to carry on with normal light activities (eating, dressing, and using the bathroom) on the day of the procedure. Plan to avoid activities which involve using a strong grip for 1 - 2 weeks after the procedure, as the hand may be a little tender.

Your consultant will advise you when you will be able to drive again.

## What are the alternatives?

An alternative to this procedure is the traditional surgical removal (fasciectomy) of the Dupuytren's tissue. Following a fasciectomy, it will have recurred in 5 out of 10 patients within 5 years. If you would like more information about this, please speak to your consultant.

There is a new treatment, which involves injecting the collagenase enzyme (Xiapex) into the Dupuytren's tissue to dissolve part of it away. This allows the finger to straighten. The recurrence rate for this treatment is being monitored.

There is also the option of not receiving any treatment at all. The consequence of not receiving any treatment is that the bent fingers may continue to worsen. If you would like more information please speak to your consultant.

## Useful contacts

[www.derbyhospitals.nhs.uk](http://www.derbyhospitals.nhs.uk)

[www.pulvertafthandcentre.org.uk](http://www.pulvertafthandcentre.org.uk)

### NHS Choices

[www.nhs.uk](http://www.nhs.uk)

### NHS 111

Telephone: 111

<https://111.nhs.uk/>

## References

van Rijssen AL, Werker PM (2006) Percutaneous needle fasciotomy in Dupuytren's disease. *Journal of Hand Surgery (British)*.

van Rijssen AL, Werler PM, Linden H (2011) 5-year results of randomized clinical trial on treatment in Dupuytren's disease: percutaneous needle fasciotomy versus limited fasciectomy, *Plastic and Reconstructive Surgery*.

Rahr L, Sondergaard P, Bisgaard T, Baad-Hansen T (2011) Percutaneous needle fasciotomy for primary Dupuytren's contracture, *Journal of Hand Surgery (European Volume)*.

If you have any queries, or require further information  
please contact your consultant's secretary or the  
Pulvertaft Hand Centre on 01332 786987.