

Dupuytren's disease

You have been diagnosed as having Dupuytren's disease. This leaflet aims to tell you about the problem, the treatment options and the likely outcomes. This leaflet is important and forms part of the consent process for any treatment you are offered.

The first thing to understand is that this is not a serious or life threatening problem. For most people, Dupuytren's is an irritation that interferes with certain functions of the hand. In addition, this is usually a painless condition.

Treatment is offered if the condition is progressing rapidly or causing you significant problems with activities, during daily living or with your occupation.

What is Dupuytren's disease?

You will have noticed a lump or band in the palm of your hand developing over the past months to years. Some people will have noticed nothing else, but some patients will notice that the band extends into one or more fingers and the fingers will not straighten fully. The lump or band is the Dupuytren's tissue, and the bending of the fingers is due to this band getting shorter.

We do not fully understand the nature of this tissue, but we do know it is similar to scar tissue. The condition can occur in other parts of the body as well, where it is known by other names:

- Soles of feet - Ledderhose disease.
- Penis - Peyronies disease.
- Over the knuckles - Garrod's pads.

Who gets it?

Dupuytren's is a genetic condition - you are born with the tendency to develop the problem. The greater your tendency, then the earlier you will develop it and the more severe it will be. However, other things can increase your risk or make the disease worse:

- Alcohol abuse.
- Smoking.
- Taking medication for epilepsy.
- Injuries to the hand - e.g. a broken wrist.

In other diseases such as diabetes, people develop a type of Dupuytren's, but it tends to be less severe.

How does the disease develop?

Most people first notice a lump (or sometimes a little dimple) in the skin of the palm, near the base of the ring finger. This lump is usually painless, but it can be tender to direct pressure.

Months or even years later, the lump can develop into a band passing into the finger or fingers.

Again months or years later, this can start to pull the finger down to the hand so the finger will not fully straighten (a Dupuytren's contracture). People often notice this when they cannot put their hand down flat, or have problems putting their hand in a pocket or putting on gloves.

The disease usually affects both hands, but one hand may be much worse. In the worst cases, all the fingers and even the thumb can be affected.

The ability to grip is not affected until the very severe stages, when the fingers are pulled so far down that it is impossible to open them to hold things.

Many people find that the condition is a nuisance, but most normal activities continue to be possible. Some activities you may have problems with include:

- Holding some tools.
- Holding a ball - e.g. for bowling.
- Getting your hand into small places.

What can I do?

There is no evidence that hand creams or other medication can slow down or cure the disease. We recommend that you stop smoking, as this is a known contributing factor.

You do need to decide whether the problems you have are bad enough to require treatment.

Treatment - the alternatives

Please remember that we do not treat Dupuytren's disease. All treatments are solely aimed at straightening bent fingers for a period of time, until the disease recurs. There are various types of treatment available which your surgeon will discuss with you:

- **Conservative** - This means treatment without an operation. There is no accepted conservative treatment for Dupuytren's.
- **Steroid injections** - Painful lumps in the palm can be treated with a steroid injection into the lump. This injection is quite painful and probably has a 50% success rate in the short term. There is no evidence that this prevents progression of the disease into a band.
- **Needle aponeurotomy** - Needle aponeurotomy is a technique, which can be used to straighten the bent finger or fingers and is the least invasive, with the least risk of complications. It is not indicated if you only 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 will not be possible to have a needle aponeurotomy.

With this procedure, you will have a series of needle 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.

- **Xiapex injection** - Xiapex is an enzyme that is injected directly into the Dupuytren's cord, softening the cord and allowing the surgeon to then straighten the finger with controlled pressure. It is not indicated if you have a lump of Dupuytren's tissue in the palm, without any bending of the fingers.

The treatment process is in two stages. **Stage 1** is the injection of the enzyme into the Dupuytren's cord. **Stage 2** occurs between one and seven days later. A local anaesthetic is injected into the hand and the finger is gently extended, causing the softened cord to break.

What should I expect after the Xiapex injection procedure? - After the injection, a soft, bulky dressing will be placed on the hand. This is to remind you not to use it for 24 hours. After 24 hours, you will remove the dressing yourself. Your hand will be swollen. We encourage you to apply ice to your hand twice a day to try and reduce the swelling. After the finger extension procedure, your hand will be numb from the local anaesthetic for some time, and it may be swollen. You will be fitted with a splint to wear at night, which you should do for about 3 months.

About 50% of patients will have a big blood blister and about 10% will have a skin tear which requires dressings for 2 - 4 weeks. The skin is often thin and tender for many months.

- **Surgery - The Derby unit tends to believe that less invasive treatment options are preferable in the first instance, but surgery may be required.**

Surgery is offered for 3 reasons:

- 1) There is a significant contracture progressing rapidly, which will require major surgery if left for longer, or which has recurred after previous treatment.
- 2) There is a contracture causing significant problems with your hand function, which is not suitable for Needle Aponeurotomy or Xiapex.
- 3) The lump in the palm is very painful.

Surgery can be of several types varying in complexity and complications:

- **Segmental fasciectomy** is the simplest and easiest operation, and is usually reserved for disease confined to the palm, although it can be used for the fingers. A series of small cuts are made and the Dupuytren's tissue removed. You will usually have a few stitches and a dressing with a splint. The operation will usually be done as a day case.
- **Fasciectomy** is the standard operation for Dupuytren's Contracture. This operation will usually be done under a regional anaesthetic, although alternatives are often available. The operation involves making a cut from the palm into the finger to remove as much of the tissue as possible. We will then make the cut into a series of zigzags to reduce problems with the scar. There will be a lot of stitches in the finger. We will usually do all the affected fingers at the same time. You will have a lot of dressings and a plaster on your hand. You will need a lot of physiotherapy.
- **Dermofasciectomy** is the operation for people with very severe or advanced disease. It involves removing the skin on the front of the finger and replacing it with a skin graft. We usually take the skin graft from the inner arm or groin region. This is a major operation and you may be in hospital for a couple of days.
- **Repeat operations** are often a mixture of the above operations, but may require more surgery to the actual joints in the fingers, which adds to the recovery time.
- **Joint fusion** is a last stage operation (as is amputation), when there is no other way of improving the function of the hand.

What should I expect after surgery?

Dressings

You will have a big bandage and Plaster of Paris on your hand which will be changed somewhere between 24 hours and 10 days from the time of surgery. You will have to come back to the hospital for the dressings to be changed for up to 6 weeks. The stitches will usually be removed after approximately 2 weeks. Some wounds and skin grafts need dressings for even longer, or require special pressure garments to help the scar to soften.

Splints

You may have a special splint made which must be worn at night time for 6 months.

Physiotherapy

You will be referred to physiotherapy for advice on moving your hand. This can be quite painful and may need to be continued for up to 6 months.

What are the risks and consequences associated with having any treatment for my Dupuytren's?

- **Incomplete correction** - It may not be possible to fully straighten the finger. This is especially common if the finger has been bent for many years, or if the finger is bent at the small joints as well as at the knuckle.
- **Nerve damage** - The Dupuytren's tissue is always wrapped around the small nerves in the finger. In a small proportion of patients (5 - 10%), the nerve is damaged and you will be left with some permanent or temporary loss of feeling at the tip of the finger. In addition, a number of patients will find that the finger is painful in cold weather (10%).
- **Recurrence** - Dupuytren's is a disease that will always return. Needle aponeurotomy and Xiapex have an approximately 50% recurrence rate at 3 years, but can be easily re-treated. Open surgery has a longer time to recurrence, but revision surgery is much harder.
- **Stiffness** - About 20% of patients will either continue to be unable to straighten their finger or will be unable to make a full fist after the surgery.
- **Infection** - A small proportion of patients will develop infection (more common in patients with diabetes) and require further surgery, or even amputation.
- **Skin graft failure** - 10% of skin grafts can be expected to fail partially or completely and require either prolonged dressings or a further skin graft.
- **Complex pain reaction** - This is a rare condition that affects patients having hand surgery. The patients develop severe pain, swelling and stiffness in the hand which will leave you unable to use the hand for up to 2 years.

Despite this list of complications, please remember that the majority of patients have a routine operation with a satisfactory recovery.

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

If you have any queries, or require further information,
please contact your consultant's secretary on the number on the enclosed leaflet.

Call 111 for non-emergency confidential health care advice and information, 24 hours a day. "Call 111 when it's less urgent than 999."