CG APPROVED

Dupuytren's Disease

Aintree University Hospital NHS
NHS Foundation Trust

Orthopaedic Department
Lower Lane
Liverpool L9 7AL
Tel:0151-525-5980

Introduction

This leaflet tells you about the condition called "Dupuytren's disease". There is a separate leaflet giving the details of the treatment of that condition.

What is Dupuytren's Disease?

Dupuytren's disease is a condition in which a lump forms in the palm and/or finger, which can pull the finger into the palm. It is not a serious condition, although it can be a considerable nuisance. We have treatment that is useful to deal with it.

In the unaffected hand there is a layer of thin tough tissue, which lies between the skin and the flesh of the palm. This tissue is called the 'palmar fascia' or 'palmar aponeurosis'. Everybody has that tissue on the front of the hand: it is a normal part of the hand.

In patients who have Dupuytren's Disease, this tissue becomes thicker than it should be (in technical terms, the body makes an extra amount of collagen to form the lump).

This lump is felt under the skin of the palm, typically near to the little finger side of the hand. The lump is usually painless, but in some patients, it can be uncomfortable for a few months after it first appears – any discomfort will soon go.

For many patients, this may be as far as the condition gets, so that the only noticeable effect is a thickening of the skin of the palm.

This thickening is sometimes confused with a "seg". A "seg" is a thickening of the skin, which occurs because of hard physical work with the hand. The difference is that a seg is a thickening of the skin, whereas a Dupuytren lump is a thickening of the tissues under the skin: the difference can be small, making it sometimes difficult to tell the two apart.

If the Dupuytren disease progresses, and that is **not** an automatic process, the next thing that will happen is a tightening, which can draw the finger towards the palm.

When that happens, it should be possible to feel the Dupuytren as a band of tissue, between the initial lump and the finger.

If the Dupuytren progresses beyond that stage, the final event is a gradual bending of the affected finger, so that either the knuckle joint, or the finger joint, cannot be straightened.

So in brief, Dupuytren's Disease is a usually painless condition, which in some patients may cause deformity. Dupuytren's condition is not the cause of any other condition. It does not cause arthritis or any other condition to develop. It is **not** linked to any form of cancer.

Why do I have Dupuytren's disease?

You have inherited it. This condition is unusual for inherited conditions, because most inherited conditions appear in children or young adults. Dupuytren's disease usually appears in middle age or older.

There are three reasons why you might not know of anyone in your family who has passed the condition to you.

- Firstly, your parent might have died before reaching the age where the disorder would appear.

- Secondly, your parent might have had the condition and not have known it. Your relative might have just a lump in the palm, believing it to be a “seg”, when it was actually a lump of Dupuytren’s tissue.
- Thirdly, your relative may have not have wanted to disclose the condition to anyone. Some people can get upset about the palm lump, and will keep their hand in their pocket, or otherwise hide it.

Whilst on this topic, as this is an inherited condition, it also means that you have the potential to pass the condition onto your own children.

This is not an automatic event, as each child you have will have a 50/50 chance of receiving the tendency from you, unless your partner also has the genetics for the condition. You should not feel too bad if you pass the condition on to your children: it is not serious, life-threatening or painful, and it can be treated.

Research has shown that the genetic passing on of this condition has started with the Vikings, which means that your ancestry is Viking!

We know that because there are parts of the world where Dupuytren’s condition is rare or unknown, and there are parts of the world where the condition is very common.

For example, it would be odd to see Dupuytren’s disease in an Indian; but it is common in Scandinavians, French, German and British.

There is evidence that about 30% of the population of Lancashire have the genetics for the condition – as you will understand, around here we see a lot of the condition, and have a lot of practice in dealing with Dupuytren’s disease.

Is it my work?

No. A lot of research has been done on this common condition to see if work has any influence on the development of the condition.

The simple answer is that the condition is just as common amongst hard manual workers as it is amongst the unemployed or persons who have office jobs.

Also the condition occurs in each hand equally. If the condition was the result of work, it ought to be more common in the hand used for that work, but it isn’t.

I injured my hand years ago, is that the cause?

No and yes. Research shows that Dupuytren’s disease is a little more common in persons who have had a significant hand injury (a deep cut or a fracture), than in persons who have had no injury.

Probably, the injury causes the condition to appear in those who are prone to it (inheritance), but the complaint appears earlier than it should because of the injury.

Curiously, if it appears immediately after an injury, it will progress for a few months, and then will usually “switch off” after a few months, so that the immediate progression in most patients is trivial.

I am a diabetic, does that matter?

No, and yes. Diabetes does not cause Dupuytren’s disease, nor does it alter its aggression.

However, people who have diabetes tend to have this condition more often than people who do not have diabetes. However, it does not matter what type of diabetes you have, nor does it matter how it is treated, or how well controlled the diabetes is.

Probably, the reason for this is that diabetes is an inherited condition, just as is Dupuytren’s disease.

The association between the two conditions is probably the result of the separate genes for the two separate conditions being near to each other on the same chromosome, so that if you inherit one you are more likely to inherit the other. This is just a theory, which is yet to be proved, but it does seem to fit the facts.

Another fact to fit into that theory is that more than 90% of persons with Dupuytren's disease have a tendency to have higher blood sugars than non-affected persons, even though their blood sugars are not abnormally high.

I am epileptic, does that matter?

No and yes. There is an association between epilepsy and Dupuytren's disease. This is not a very strong association, as most epileptics do not get Dupuytren's disease. Dupuytren's disease does not case epilepsy.

The association is probably an effect of the drugs used to treat the epilepsy, as the association is the same whether the epilepsy is inherited, or whether it occurs because of a head injury.

The thinking is that the anti-epileptic drugs affect something in the liver, which switches the Dupuytren tendency on. Whether this is influenced by family history is unknown.

The vast majority of patients with Dupuytren's disease do not have a heavy drinking history, although drinking too much may be a factor which precipitates the condition in those who are prone to it. The matter is very complex, and has not been properly researched yet.

Specialists in Dupuytren's disease will not think of you as an alcoholic (and will tell your doctor so, if that has been suggested).

What is Dupuytren's diathesis?

For most patients, the disease first appears in middle age or later and affects just the palm and/or one or two fingers.
After treatment, the correction of the bend will last for many years. That is what usually happens. In other patients the condition may progress differently.

In them, the condition can start young, affect more of the hand, and recurrence will tend to be early after treatment.

We refer to these patients as having a strong "diathesis".

Diathesis is just a posh name for "tendency". In other words, some patients will have a slightly different version of the condition, which makes them more prone to recurrence.

The most likely explanation for the diathesis is that the disease has been inherited from **both** parents. As up to 30% of the local population have the genetics for this condition, it is not especially odd for this double inheritance to happen.

We treat patients with a strong diathesis in a slightly different way, which is described in the separate leaflet we have prepared on the treatment of Dupuytren's disease.

I want to know more about this disease.

Most of the further information you can find will be in specialist hand surgery textbooks. However, pictures of surgery might be upsetting for some people

The best book on this subject is called "Dupuytren's Disease", which you should be able to get from your library. Much of this book is a "how to do it" guide for surgeons, so is not very relevant to learning about the condition.

It does have the advantage for you that the pictures in the book are in black and white, so are not gory in that sense, and there is a large section on the cause of the condition.



If you require a special edition of this leaflet

This leaflet is available in large print, Braille, on audio tape or disk and in other languages on request. Please contact the Equality and Diversity Department on:

0151 529 4969

Aintree University Hospital NHS Foundation Trust is not responsible for the content of any material referenced in this leaflet that has not been produced and approved by the Trust.