Dupuytren's disease

What is Dupuytren's (pronounced 'Dew-pee-tronz')?

Dupuytren's is a thickening of the fibrous tissue between the skin and the tendon sheaths in the hands. It is not a growth. It is not cancerous. It is a genetic condition. It is much more common in Northern Europeans. The Vikings may have brought the gene to the UK! The disease usually starts later in life. It can start after an injury.

How it appears

You may get nodules (small lumps of tissue) in the palm of the hand just under the skin. There may be tough fibrous bands going into the fingers, often bending them. There may be big lumps, or 'pits' in the skin.

Associated features – we rarely operate on these

- 'Plantar fibromatosis' the same process in the foot. It never curls up the toes.
- 'Peyronnie's disease' thickening just under the skin of the penis which may curve it. This is rarely a problem.
- 'Garrod's pads' lumps on the back of the hand, often near small joints.

Non-medical treatment

Splints only help after the bands have been surgically divided. Acupuncture, massage, etc. do not help.

Operation

This involves removing as much Dupuytren's tissue as possible, and preserving the nerves it has wrapped around. Obviously with a genetic disease, we cannot remove it all. It commonly comes back, especially in younger people particularly when it occurs over the central finger joint (P.I.P. joint). We never operate if a lump is not causing a problem because if the disease came back after this, it would be more likely to damage nerves operating in future through scar tissue.



We get the best results if fingers have been bent up at the knuckle joint (M.C.P. joint). These can almost always be straightened out and do not need a splint afterwards.

If the disease involves the PIP joint, we can never get it perfectly straight and the Dupuytren's tissue and contracture often comes back. An operation in the finger may need to be quite extensive, dividing the ligaments around the joint to release the contracture as well as taking out Dupuytren's tissue.

Surgery is usually done under General Anaesthetic. Operations take one to two hours. A tourniquet is used to reduce bleeding. The incisions are usually in zig-zags and long because we look for every nerve in the finger. We remove as much Dupuytren's tissue as possible. This is likely to require many stitches.

Common operative variations

Fasciectomy	= taking out Dupuytren's tissue
Dermo-fasciectomy	r = taking out Dupuytren's tissue and involved skin
Z-plasty	= making skin incisions into zigzags to gain length where it is tight
Joint release	= cutting the ligaments around the P.I.P. joint if this is bent rigidly
Skin graft	= putting forearm skin on the palmar surface of the finger. It reduces risk of recurrence, but grows hair and can contract or might not take.

Infection:	This may need antibiotics. If the wound is increasingly smelly, red or painful, you should get it checked by a doctor or nurse.
Recurrence:	The disease very commonly comes back. In young men with disease involving the P.I.P. joint, the recurrence rate is 50% at 10 years.
Damage to nerves:	This surgery leads to numbness in part of the digit.
Extensive scars:	These may be a result of the surgery so that we can preserve the nerve supply. In most people the scars settle down like normal lines in the palm. In some people they are lumpy and uncomfortable. We encourage people to massage the scars once the stitches are out. It may take a year to settle.
Stiffness:	Most people experience this. We encourage you to move every joint of every finger as much as possible after the procedure.
Artery damage:	The small finger arteries are very occasionally damaged. This is more likely if the finger has been operated on before. There are two arteries in each finger, so it is rare to damage both. The finger then ends up painful and cold.
Complex Regional Pain Syndrome:	Pain and stiffness after Hand Surgery.

Risks of operation

Collagenase injection

An injection has been developed to dissolve the bands. We do not commonly offer this at East Sussex. A manipulation is needed a few days after the injection and skin tearing is common. It can dissolve other body tissues (nerves or tendon) so this is not suitable for Duputyren's into the finger or recurrent disease. Research from long-term studies show that Duputyren's comes back more quickly after an injection than an operation. It is no longer recommended widely.

Alternative operations

1. Cutting prominent bands under Local Anaesthetic = 'fasciotomy' - This only works for bands in the palm which have caused the knuckle joint to be bent. It does not remove lumps. It cannot be done in the finger, only the palm.

2. **Amputation** - If the finger is very bent up and the risk of recurrence is high, amputation can be a better option, particularly for a useless little finger, as this provides a visual improvement. It does not require much after-care and all the other fingers can start moving straight away.

How can I prepare for surgery?

It is important to prepare for an operation to reduce the risks of complications. You should stop smoking, do some exercise, eat healthily and prepare for the phase after surgery. Fruit, vegetables and protein help wound healing. There is information about how to do prepare at: <u>https://www.cpoc.org.uk/patients</u>.

After surgery you must

- Exercise all the joints that you can. Keep moving the fingers.
- Keep your hand elevated until the swelling goes down.
- Keep the hand dry until the stitches come out (usually 10 to 15 days).
- Avoid lifting heavy objects for a month. Your hand will be weak.
- Massage the scars once the stitches are out, with firm circular movements.

Post-operative care – We like to check the wound within one or two weeks (for pus or blood clot). We remove the stitches and check on exercises at two weeks post-op. The wound may take three to four weeks to settle. We encourage exercises (stretching the fingers straight and bending them up). If the disease was extensive, we sometimes arrange a splint to wear at night. We hope that you will resume stretching exercises for the P.I.P. join if it starts to bend up again. It may take six weeks to get back to manual work. Driving should be avoided while there is a bandage on (which may be three or four weeks) and may be difficult after that. You may see a physiotherapist in the Hand clinic.

Post-operative contacts:

Conquest DSUMon–FriOffice hours0300 131 4500 (ask for Richard Ticehurst ward)Eastbourne DSUMon-Fri8am-6pm0300 131 4500 (ask for Day Surgery)Eastbourne Orthopaedics outpatient matron0300 131 4576

Important information

The information in this leaflet is for guidance purposes only and is not provided to replace professional clinical advice from a qualified practitioner.

Your comments

We are always interested to hear your views about our leaflets. If you have any comments, please contact the patient experience team on 0300 131 4784 or <u>esh-</u> <u>tr.patientexperience@nhs.net</u>.

Hand hygiene

We are committed to maintaining a clean, safe environment. Hand hygiene is very important in controlling infection. Alcohol gel is widely available at the patient bedside for staff use and at the entrance of each clinical area for visitors to clean their hands before and after entering.

Other formats

If you require any of our leaflets in alternative formats, such as large print or alternative languages, please contact the Equality and Human Rights Department on 0300 131 4434 or <u>esh-tr.AccessibleInformation@nhs.net</u>

After reading this information are there any questions you would like to ask? Please list below and ask your nurse, doctor or practitioner.

Reference

The following clinicians have been consulted and agreed this patient information:Prof Scarlett McNallyConsultant Orthopaedic SurgeonMiss Miranda ChampionConsultant Orthopaedic SurgeonMr Hemant ThakralConsultant Orthopaedic Surgeon

The directorate group that has agreed this patient information leaflet: Diagnostic, Anaesthetics and Surgery

Next review date:August 2026Responsible Clinician:Prof Scarlett McNally, Consultant Orthopaedic Surgeon