

A guide to surgery and exercises for Dupuytren's contracture

Information for patients, relatives and carers

Trauma & Orthopaedics

 For more information, please contact: York Hospital

Orthopaedic Out Patient Clinic York Telephone: 01904 726537 Advanced Practitioner Hand Surgery Telephone: 01904 725978 Hand Physiotherapist Telephone: 01904 725390

Wigginton Road, York, YO31 8HE

Bridlington Hospital

Kent Ward, Bridlington Hospital Telephone: 01262 423110

Bessingby Road, Bridlington, East Yorkshire, YO16 4QP

Contents	Page
What is Dupuytren's Contracture?	4
What causes Dupuytren's Disease?	5
How successful is the treatment?	6
What happens if you have no treatment?	7
What do I need to do to prepare for surgery?	8
What kind of anaesthetic will I have?	11
On the day of your operation	13
What happens when I arrive for my operation?	13
What happens before surgery?	14
What happens during the operation?	15
Are there any risks involved in having surgery for Dupuytren's contracture?	16
What are the benefits of surgery for Dupuytren's contracture?	17
What are the alternatives to surgery for Dupuytren's contracture?	
What happens after my operation?	18
When can I go home?	18
Before you leave the Day Unit or Ward	19
How will my hand be dressed after my operation?	19

How do I care for my dressing and wound after my operation?	0
What should I do if I have any problems or worries about my operation after going home?2	
How should I look after my wound after my stitches have been removed?22	
Once your wound is fully healed2	2
How will I feel after my operation?2	3
Do I need to do anything after the operation?24	4
Exercises to follow after your operation2	5
Follow up2	8
Additional questions that patients sometimes ask2	9
Tell us what you think of this leaflet3	1
Teaching, training and research3	1
Patient Advice and Liaison Service (PALS)3	1
Leaflets in alternative languages or formats	2

What is Dupuytren's Contracture?

Dupuytren's disease is a thickening and shrinking of the layer of flesh just under the skin of the palm, where scar like tissue forms beneath the skin of your fingers and palm. It can cause lumps or dimples in the skin of the palm. Over time, this fibrous tissue can contract and can draw the fingers down into a bent position; this is known as Dupuytren's contracture. It is named after a surgeon who wrote about its treatment.

The tissue lies above the tendons that are responsible for bending the fingers but it does not affect the tendon. The progress of the condition can take many years. When the problem occurs in young adults it tends to progress very quickly.

The ring and the small fingers are affected more often than the others, although any or all of the fingers may be involved.

1

2

3

- 1. bent finger
- 2. abnormal nodules in the connective tissue beneath the skin
- 3. normal connective tissue

(Image taken from NHS Choices website)

What causes Dupuytren's Disease?

There is a layer of tissue, called fascia, under the skin of the palm, which helps keep the skin from sliding around when you grip things. In some people this tissue shrinks and pulls on the skin and on the fingers. The problem appears to be inherited (genetic) where tissue grows abnormally. This usually begins in adulthood for no clear reason. It is painless and benign and is unpredictable.

Sometimes a condition of trigger finger can be associated with Dupuytren's Contracture.

The tissue can sometimes be seen in single hands or may be triggered following certain forms of injury.

Some people will only have a lump, others a very difficult problem with severely bent fingers. It can occur in the hand and in other parts of the body such as feet. The tissue can be found in both hands at the same time but the progression of bending of fingers can be different in each hand. If you get contracture in one or more fingers and this is causing you difficulty with your daily activities your surgeon may recommend surgery.

How successful is the treatment?

It depends on how bad the problem is, as well as the person's age, sex and other medical problems.

Approximately one in three people who have surgery for Dupuytren's Contracture will have similar problems later on, either developing the contracture elsewhere in the hand or it coming back to the area of previous surgery. Most people who have had surgery for Dupuytren's Contracture feel that they made the right choice to have surgery.

In most cases the overall success of the surgery depends on how well the exercise regime is carried out after surgery.

The recovery period after surgery can extend into several months.

If the Dupuytren's contracture happens again or when your fingers have been bent for a very long time, and you have surgery, there are several additional aspects of surgery you will need to consider. It may be necessary to take a small skin graft from the wrist of the same hand to fill any skin defect once the finger has been straightened. Also, a wire may be placed through the finger joint to keep the finger straight while your wound is healing. The wire is removed after three to four weeks after surgery; after this you will probably need to wear a splint at night to maintain the correct position for several weeks.

Page 6

What happens if you have no treatment?

It generally does not get better on its own. Some people will notice a lump or a line of tightness in the skin of the palm. It may never develop into a worse problem and it will probably be best to leave alone. Others will have a progressive bending of their fingers.

For example, people who first notice the problem in their forties and younger are likely to have more trouble overall than those whose problem first show up in their seventies. In terms of how badly the fingers curl, how likely the problem is to reoccur after surgery, and so on.

The longer joints have been bent before surgery and the more bent they are before surgery, the less chance that surgery will get them fully straight because of joint stiffness.

This leaflet contains information about the treatment of Dupuytren's contracture. It explains a little about what will happen before, during and after your operation and tries to answer some of the questions you may have.

The doctors and nurses are there to help you. They will always make time to listen to you and answer your questions. If you do not fully understand anything about your operation, please ask.

What do I need to do to prepare for surgery?

If you have been given an admission form to complete, please bring the completed form with you when you come for your operation.

If you become ill or cannot keep your appointment for any reason, please tell us as early as possible so that another patient can be offered treatment.

We will rearrange your appointment.

Here are the department telephone numbers. Please ring the department where you are being treated:

Day Unit Waiting List for York Hospital Tel: 01904 725541

York Clifton Park Clinic: Tel: 01904 721963

Waiting List for Scarborough/Bridlington Hospitals Tel: 01723 342078

Kent Ward at Bridlington Hospital (If cancelling on the day of your appointment) Tel: 01262 423110

Please help us to make sure that your surgery will go ahead by following these instructions:

If you are taking medication to thin the blood you need to contact us regarding advice on the need to stop this medication prior to surgery. It may be necessary to stop your medication for as much as 10 days before surgery. This will be discussed further at your pre-assessment appointment.

Please follow the rules below:

- You should have **no** food or cloudy drinks during the six hours before your admission.
- You should drink plenty of clear fluids, those you can see through until **two** hours before your admission as it helps your recovery if you are not thirsty.
- You should not have anything to eat or drink during the **two** hours prior to your admission.
- Do bath or shower as usual before your admission.
- Do bring a clean dressing gown with you if you wish.
- Do keep all jewellery at home apart from a wedding ring; you may be able to keep wearing your wedding ring, but not if it is on the hand to be operated on.
- Make up and nail varnish must be removed before surgery. Please bring nail varnish remover if necessary.
- Do bring something to help pass the time while you wait e.g. books, magazines.

- Do arrange for an adult to accompany you home and to stay with you for 24 hours following surgery.
- Do arrange your transport home. Car parking is limited at our hospitals.
- Remember you will not be able to drive after your operation until your hand has healed.

Please use this space to make a note of any questions you have or to list any items you need to bring with you.

What kind of anaesthetic will I have?

Your anaesthetist will speak to you before the operation to discuss any concerns you may have and check when you last had something to eat or drink.

Your operation can be carried out with either a regional or a general anaesthetic. If you have a regional anaesthetic, you will be awake throughout the operation. Regional anaesthetic can be injected into your armpit or more commonly is injected behind the collarbone. Your whole arm will become numb which means you will be comfortable and not need further pain relief until it wears off.

Your arm will probably stay numb for four to eight hours and some areas may stay numb for 24 hours. You will be provided with a sling to help you protect your arm whilst it is numb. Your recovery time and therefore time to discharge is less with a regional. If your hand or arm is still numb after 48 hours, please contact the Acute Pain Team through the switchboard at the hospital.

You may be offered a light sedation with the regional anaesthetic. Please speak to the anaesthetist for more information. If you have sedation, you may be relaxed or drowsy during the operation and will need someone to stay with you for 24 hours when you go home. You will be provided with more detailed information about general and regional anaesthetics by the preoperative assessment nurse when you attend before your surgery. You may also receive a patient leaflet giving details of your anaesthetic called "about the anaesthetic for your hand operation". You can find out more information about anaesthetics and their risks on the website of the Royal College of Anaesthetics at www.rcoa.ac.uk.

On the day of your operation

A large bulky bandage will be placed on your hand at the end of the operation; you will need to wear short or wide sleeved clothing to allow for this. Ladies may wish to consider wearing a front fastening bra, and clothing with elastic waistbands for ease of use.

What happens when I arrive for my operation?

The nurses introduce themselves to you and explain what will happen to you during your stay. You will be asked about your present medicines, any allergies you may have, your arrangements for going home and who is to look after you.

The surgeon or nurse practitioner will check your details with you and, if this has not already been done, ask you to sign a consent form (FYCON50-1 Surgery to Remove Dupuytren's Contracture) saying that you:

- Fully understand your operation and anaesthetic
- Fully understand the risks and benefits
- Are aware of the alternatives and
- Agree to have the operation

A copy will be kept in your patient notes and you will be given a copy to for your own records. Please ask if there is anything about which you are uncertain or do not fully understand about your treatment.

What happens before surgery?

You are asked to change into a theatre gown and one of our dressing gowns. You may prefer to bring your own but it must be clean as you are going into an operating theatre area.

You will be taken first to the anaesthetic room where you will be given your anaesthetic. If this is a regional anaesthetic, you will then go into our recovery area with a nurse to monitor you whilst your arm goes numb. When you are ready, you will be taken into the operating theatre. Your identity is checked as part of the safety procedures.

What happens during the operation?

During the operation for this condition, the surgeon removes the diseased tissue through a long zigzag cut along your palm and on the finger. This reduces the risk of your scar contracting as it heals and allows your surgeon to identify and remove the abnormal tissue and avoid any important structures including nerves and blood vessels.

The operation is carried out with a tight band (tourniquet) like a blood pressure cuff to stop bleeding, placed on your upper arm. You should not feel it at the time of your operation. The band allows your surgeon to see more clearly all the important structures in the hand.

Rarely, patients may get some bruising where the tourniquet was placed. This usually disappears over the first week.

Are there any risks involved in having surgery for Dupuytren's contracture?

- Wound infection (less than one in 20 patients).
- Bleeding which can lead to a haematoma formation (less than one in 20 patients).
- Delayed wound healing (one in 25 patients).
- Infections and Haematomas can lead to the death of the skin. This will heal but will take several weeks of dressing changes and wound management.
- Nerve damage, this will result in numbness beyond the point of damage and will take time to improve (less than one in 100 patients, but increases to 5 to 10 in 100 patients if surgery is redone).
- Damage to an arterial blood vessel in your finger (one to two in 50).
- Excessive soft tissue swelling (less than one in four) causing stiffness and reduced movement in finger joints. This does improve over time with physiotherapy.

• The condition can come back even when it is completely removed (one in four patients). It may come back in other fingers.

If your condition does reoccur, and repeat surgery is needed, the surgery may have further risks which your surgeon will discuss with you.

When surgery is carried out on the same finger more than once, there is an increased risk to the life of the finger, because of the alteration to the circulation (less than one in 100 patients).

 A rare complication of all hand surgeries whether simple or complex is Complex Regional Pain Syndrome (CRPS) or Reflex Sympathetic Dystrophy (RSD). Less than one in 500 people suffer from this. It results in painful stiff hands that can persist and be difficult to treat.

What are the benefits of surgery for Dupuytren's contracture?

A successful operation straightens your fingers allowing your hand to function normally. It usually prevents a permanent deformity developing and avoids the need for amputation and permanent loss of function. If left untreated, your finger joints may become permanently stiff and an operation at this stage may be less successful.

What are the alternatives to surgery for Dupuytren's contracture?

The most effective treatment is surgery and we only provide this in our hospitals. Other centres or health providers may also offer non-surgical treatments such as needle aponeurotomy, Botox or collagenase injections. You can discuss these options with your GP before you are referred to us. You can find more information on these treatments on the NHS Choices website (www.nhs.uk).

What happens after my operation?

If you have had a general anaesthetic, after surgery you will be taken to the recovery area. A nurse will monitor your progress. When the nurse is happy with your recovery, you return to your trolley or bed in the ward area. If you have had a regional anaesthetic, you will be taken back to the ward. When you are able to sit up you will be offered a drink.

When can I go home?

You will be able to go home with an adult who can look after you when it is felt you are ready. Your surgeon or one of their team will see you before you go home. **Remember you must not drive yourself or use public transport.**

Before you leave the Day Unit or Ward

A nurse will go through the discharge instructions with you and tell you about the care you need at home. The nurse will give you the necessary follow up papers and appointments. Please ask if you are unsure of any of the instructions.

How will my hand be dressed after my operation?

You will have a small white dressing over your wound. Over the top of the dressing will be a large, bulky dressing of cotton wool and a crepe bandage that will cover most of your hand and wrist. The bulky dressing is necessary to put pressure over the palm to prevent a blood clot (haematoma) forming; blood clots can delay wound healing and lead to infections. Sometimes a plaster of Paris (PoP) is added to the dressing to make it hard. This keeps the finger straight while your wound is healing.

You should keep the bulky dressing in place until you are seen in clinic one to two weeks after surgery. You will also need to wear a sling for three to four days which you will need to remove when you do your exercises. A nurse will put your sling in place before you go home.

How do I care for my dressing and wound after my operation?

Do not get your bandage wet. You can cover it with a plastic bag or rubber glove or you can buy wound protectors from chemists and on the internet. Please ask your nurse for more information. All dressings must be kept dry; if you wear a plastic bag over the bandage whilst washing it must be removed as soon as you have finished. The sweating from your hand can make the dressing wet, and increases the risk of infection.

The bulky bandage on your hand needs to stay in place until you are seen in clinic one to two weeks after surgery. It is necessary to compress the wound to keep swelling and bleeding to a minimum following the surgery. Both of these factors may hinder wound healing.

We will give you instructions covering exercises and skin care you have to start once the wound has healed.

You will need to come back to the hospital or outpatient clinic to get your dressing and stitches removed.

What should I do if I have any problems or worries about my operation after going home?

In the first 24 hours following your operation, please telephone the following, depending on where you were treated:

York Day Unit	01904 726010
(between 7.30am and 7.30pm) or	
The nurses on the Orthopaedic outpatient clinic	01904 726537
Out of hours contact: Extended Stay Unit (overnight Mon-Thurs)	01904 721265
Ward 29 (Fri - Sun)	01904 726029

Bridlington

Kent Ward 01262 423110 Or phone your consultant's secretary through the hospital switchboard (01723 368111) to make an appointment.

If you have problems out of hours or more than 24 hours after your operation, please contact your GP or attend your local emergency department if serious.

York emergency department:	01904 726587
Scarborough A&E department:	01723 387111

How should I look after my wound after my stitches have been removed?

Your wound may become hard along its scar. This is due to the formation of scar tissue, which eventually disappears. Patients sometimes experience tingling, numbness, pulling and itching as their wound heals. These sensations are part of the healing process.

Once your wound is fully healed

You will need to moisturise the skin at least three times a day to begin with, to help the dry surface to lift off. If it stays in place it will continue to dry out, getting harder and restricting movement. Continuing to moisturise the skin will also help to soften the scar tissue.

How will I feel after my operation?

Having a regional anaesthetic will mean your hand and arm are numb for several hours after your operation. It therefore helps you recover comfortably without requiring pain relief. You may need to take pain relief later on as the numbness starts wearing off.

Usually you will have moderate pain in your hand or wrist for two to three days. You are advised to take painkillers (paracetamol or ibuprofen) regularly over the first two weeks following your operation so that your pain is under control and you recover more quickly.

Some painkillers have side effects including nausea, dizziness and constipation. An example is Codeine which is one of the painkillers that can be used for moderate pain. Ensure you drink lots of fluids to prevent constipation and include fibre in your diet. If the pain relief tablets give you side effects, you may need to reduce the dose or stop taking them.

You may need to try simple pain relief such as paracetamol, please discuss with your GP team if you need further advice or have side effects. As you begin to feel better, you will not need as many painkillers. You should reduce the amount you take gradually rather than stopping abruptly.

Your fingers should stay pink and warm. If or when bruising appears the colour may alter. If you have any concerns about your circulation then please contact the clinic a soon as possible as you may need urgent care. Pins and needles in fingers can be a sign of altered sensation. Put your hand in the air and move your fingers. If the sensation settles you need to keep your hand elevated more. If it is not relieved, attend your nearest Emergency Department or phone the ward for advice.

Do I need to do anything after the operation?

For the first few weeks following your operation, you should **keep your hand raised as much as you can with your hand higher than your elbow**. This will help to reduce pain and swelling. Support your hand on cushions when you are sitting. You should not walk with your hand at your side, as this will cause pain and swelling. It will help to wear your sling.

The nurse will show you how to loosen the bandage should swelling occur in the 48 hours following your surgery.

As your hand heals, you should try to move your fingers and thumb regularly. Your exposed fingertips may have a slight bluish appearance if caused by bruising. This should fade in a few days.

If your fingertips become cold, blue and numb please contact the Ward or your GP, see useful telephone numbers at the end of this leaflet.

Exercises to follow after your operation

Following your hand operation you will get some swelling in your hand and or fingers, this is normal.

The surgical procedure causes swelling. Swelling can hinder wound healing because it stops the circulation from taking nutrients to the wound to aid in the healing process.

Swelling restricts movements of fingers as it takes up flexibility in the soft tissues that is present to allow movements of joints. If swelling is allowed to sit around joints it will lead to joint stiffness. You should regularly move your wrist, elbow and shoulder to avoid these joints becoming stiff or painful.

To keep swelling to a minimum:

- 1. Always rest with your hand higher than your elbow
- 2. When walking, do not hang your arm by your side for more than a minute at a time

It is very important that you start your exercises as soon as possible after your operation. We will show you and provide you with a leaflet on your exercise after your operation. These exercises work the small muscles in your hand returning blood to the heart and helping reduce the swelling in the soft tissues. The exercises also help keep your fingers in the correct position after surgery. You will have a bulky bandage on your hand after the operation (this will be removed at your first dressing appointment by your nurse). At this appointment you will be given instructions and advice on caring for your wound and additional exercises.

Carry out the following exercises as soon as you get home and over the next two weeks as your bandage will allow.

- every 30 minutes
- until your stitches are removed

Put your arm straight up in the air then:

- 1. bend and straighten the joints of your fingers that protrude out of the bandage
- spread your fingers and thumb so that the skin on the side of the fingers feels tight and hold for 10 seconds
- 3. Then press the fingers together really tightly and hold for 10 seconds

Do not worry about your stitches; they will not be affected by the exercises.

The exercises may be painful; to help with this you can elevate the hand and take pain killers. It is important that you do these exercises to help your recovery. If you have any problems with these instructions, or wish to obtain further information please ring one of the following:

York Hospital

Hand Physiotherapist	01904 725390
Orthopaedic Out Patient Clinic:	01904 726537
Advance Practitioner Hand Surgery:	01904 725978

Bridlington Hospital

Kent Ward:

or

01262 423110

Phone your consultant's secretary through the hospital switchboard (01723 368111) to make an appointment.

Follow up

You will be given appointments for follow ups with a member of the hand team. Specific follow ups include:

After one to two weeks the hand therapist or practitioner will reduce the dressings and check the wound. You will have a new dressing like a plaster for the next week or two until your sutures are removed.

After 10-14 days, you will have your stitches removed. This can be uncomfortable especially in the fingers, so you may wish to take painkillers before your appointment. You will be seen by the hand physiotherapist who will help and guide you with the additional exercises for the few weeks, while you recover from your operation.

At this point you will be assessed to see if you need a splint to wear during the night. This is custom made and needed in around a quarter of patients. You may need to wear this overnight over several weeks and have further appointments depending on your progress.

You will have on-going review for six to twelve weeks after your operation to support you during your recovery.

If you have not received the appointment after several weeks, please contact us.

Additional questions that patients sometimes ask

Can I bath or shower?

You may bath or shower as usual but please keep your dressings dry. The first time you bath or shower at home you may feel light headed or faint. You should, therefore, leave the bathroom door unlocked and arrange for someone to check periodically that you are safe. You may use any safety equipment that you usually use.

Will my bowels be affected?

Due to the change in your usual routine and if you are taking painkillers containing codeine, you may experience a change in your bowel habit. This could take several days to return to normal. Drink plenty of fluids and try to eat a high fibre breakfast cereal and wholemeal bread every day. If you feel constipated and the problem is not improving, ask your local pharmacist or GP for advice.

When can I have sex again?

You can resume your usual sexual activities when you feel able to without too much pain and discomfort.

How soon can I resume my normal activities?

You will usually need to take at least two weeks off work. It is not unusual to need to have six weeks off work, following this type of surgery.

Because the bulky dressing covers most of your hand, you will need help with jobs such as shopping and cooking while you have your dressings and stiches in place.

When can I start driving again?

Driving your car is not advisable until the bulky bandage is removed, and your wound has healed. You will have to wait until your stitches are removed. You are also advised to check with your insurance company when you will be covered to drive again after your operation

Tell us what you think of this leaflet

We hope that you found this leaflet helpful. If you would like to tell us what you think, please contact: Nurse Practitioner in hand surgery, York Hospital, Wigginton Road, York, YO31 8HE or telephone 01904 725978.

Teaching, training and research

Our Trust is committed to teaching, training and research to support the development of health and healthcare in our community. Healthcare students may observe consultations for this purpose. You can opt out if you do not want students to observe. We may also ask you if you would like to be involved in our research.

Patient Advice and Liaison Service (PALS)

PALS offers impartial advice and assistance to patients, their relatives, friends and carers. We can listen to feedback (positive or negative), answer questions and help resolve any concerns about Trust services.

PALS can be contacted on 01904 726262, or email yhs-tr.patientexperienceteam@nhs.net.

An answer phone is available out of hours.

Leaflets in alternative languages or formats

If you would like this information in a different format, including braille or easy read, or translated into a different language, please speak to a member of staff in the ward or department providing your care.

Patient Information Leaflets can be accessed via the Trust's Patient Information Leaflet website: <u>www.yorkhospitals.nhs.uk/your-visit/patient-information-leaflets/</u>

Owner	Jayne Lenighan, Nurse Practitioner
	Mr Spiros Stavropoulos, Consultant Orthopaedic Surgeon
Date first issued	September 2001
Review Date	November 2027
Version	5 (reissued November 2024)
Approved by	Orthopaedic MDT
Linked to consent form	FYCON50-1 Surgery to remove Dupuytren's Contracture v4.3
Document Reference	PIL 215 v5.3
© 2024 York and Scarbo All Rights reserved.	rough Teaching Hospitals NHS Foundation Trust.

www.yorkhospitals.nhs.uk