# Inguinal Hernia

## Information for patients

This leaflet can be made available in other formats including large print, CD and Braille and in languages other than English, upon request.

This leaflet tells you about inguinal hernia and explains the treatments that can help.

### What is an inguinal hernia?

An inguinal hernia is the protrusion (bulging) of your intestine (bowel) through a weakness in the muscle wall in your groin.

### How does an inguinal hernia develop?

The abdominal wall is made up of a sheet of tough muscles and tendons that run down from your ribs to your groin. It acts as nature's corset holding all the internal organs, especially the intestines (bowels), in your abdomen.

If a weakness or gap develops in your abdominal wall, then the 'corset effect' is lost and part of your abdominal contents, usually the intestine, bulge through, causing a lump in your groin. Some people are born with a weakness in their groin, while others develop a weakness over time. The weakness or opening of a gap in the muscle can happen of its own accord at a point of natural weakness, or by overstretching or over-exertion (straining). Lifting heavy weights, too much exercise, or a simple cough or sneeze could cause a hernia.

### Can having an inguinal hernia become dangerous?

Many people have a hernia for years and never need surgery, but sometimes a hernia may become strangulated. This is when the loop of intestine, which forms the hernia, twists on itself. This could cause a bowel obstruction (blockage) which can be very dangerous if left untreated. If this were to happen you would usually start vomiting (being sick), your abdomen would swell and you would become constipated and you may feel pain. If this happens you must seek urgent advice from your GP/A&E, as you may require an urgent operation.

### What treatments are available?

A hernia will never heal itself and medicines will not cure it. An abdominal support (truss) may relieve your discomfort but will not heal or repair your hernia. An operation is the best option.

Most people can have their operation as a day case patient and will not need to stay in hospital overnight. The operation to repair your hernia can be done in several ways.

# Inguinal Hernia

The most common are:

- **traditional repair**. Your surgeon will make an incision (cut), usually over your hernia bulge. The piece of intestine or other organ bulging through your abdominal wall is returned to where it belongs and the opening is closed by stitching both sides firmly together to repair your abdominal wall.

- **mesh repair**. The operation is performed as described above. In addition the muscle wall around your hernia is strengthened by placing a fine sterile mesh across the opening to prevent a hernia developing again. A mesh repair can also be carried out using laparoscopic repair (see below).

- **laparoscopic (keyhole surgery) repair**. Your surgeon will make 3 or 4 small incisions around your hernia. He or she will insert a laparoscope (an instrument like a tiny telescope) into one of these incisions. This lets your surgeon carry out your operation using miniature instruments, through the laparoscope. You can usually return to your normal daily activities sooner than a traditional open operation.[1] This method of hernia repair is not suitable for everyone.

Your doctor will explain the different treatment choices available and advise what he or she feels would be best for you.

A hernia is usually repaired under either:

- **a general anaesthetic** (a state of carefully controlled and supervised unconsciousness that means you are unable to feel any pain)

- **a spinal anaesthetic** (where you are awake but have an injection in your back that numbs the lower part of your body).

## Are there any risks or complications with surgical repair of a hernia?

As with all surgical procedures there are risks involved but steps are taken to minimise (reduce) these.

**Short term risks and complications may include:**

- **bleeding.** You may develop bleeding inside your groin or from your wounds post operatively. If this occurs it will be treated accordingly. You may need a blood transfusion or another operation.

- **bruising.** A little bruising may develop around your wound sites. This is normal and will settle over time.

# Inguinal Hernia

- **wound infection**. If you feel feverish or your wound becomes inflamed (hot and red) and sticky, you should see your GP. This can be treated with antibiotics and you will not usually need to be re-admitted to hospital.

- **haematoma/collection.** A collection of blood can sometimes develop at a wound site. This may require drainage.

- **injury to surrounding structures.** These can include bowel, bladder and blood vessels.

- **recurrence of your hernia**. There is a chance that a hernia can recur in 2 patients in every 100 who have had a hernia repaired by the mesh method. Hernias repaired by the traditional method recur in 5 patients in every 100.[1]

- **retention of urine post operatively.** After surgery a small number of patients may find it difficult to pass water immediately after surgery. If this does happen a urinary catheter may need to be passed to empty your bladder. This would be removed before you are discharged home.

- **chronic pain/numbness.** This can be felt round your operation site. This happens less often with laparoscopic surgery. [1]

- **scarring.** You will have 1 - 4 small scars following keyhole surgery from the incision sites, dependent on the type of surgery you have.

- **hydrocele.** Male patients may experience a build up of fluid in the scrotum (testicles). This will improve with time, very rarely you may need an operation to treat this.

- **ischaemia to testes.** Male patients may develop this due to decreased blood flow to the testicles following surgery. This is rare. Depending on the extent of this you may need to return to theatre.

- **mesh infection**. If this were to happen you would develop inflammation (increased pain or discomfort around your wound). You can be treated with medication, but if it does not settle the mesh may have to be removed.

- **deep vein thrombosis** - DVT (blood clots in the leg veins) or pulmonary embolism – PE (blood clots in the lungs).

  You will be given a leaflet “Reducing the risk of venous thromboembolism (blood clot) while you are in hospital and after you have been discharged”, which explains about this in detail.

# Inguinal Hernia

All adult patients will have their risk of developing a blood clot assessed within 12 hours of admission. Patients who are being admitted for planned surgery may have their risk assessed at pre-assessment.

The nurse or doctor who carries out your assessment will discuss your risk factors with you and advise on treatment to reduce your risk.

You will also be given information, "Your personal advice for the prevention of venous thromboembolism", advising you on how to reduce your risk of developing a blood clot while you are in hospital and when you go home.

- **risks associated with a general anaesthetic**. You will be given a leaflet "You and your anaesthetic", which explains in detail about anaesthesia. Your anaesthetist (a doctor with special training in anaesthetics) will discuss this with you.

## What will happen at the pre-assessment clinic?

You will meet the nurse practitioner who will explain your operation and answer any questions you may have. The nurse will complete your admission forms and start to discuss and plan your discharge from hospital after your operation. Some routine health checks will be taken at the clinic, for example, blood and urine tests, ECG (heart tracing), and x-rays if required.

This reduces the length of time you will need to stay in hospital as an in-patient. (See leaflet, "Your pre-assessment clinic appointment").

You can expect your appointment to last between 1 – 3 hours depending on what tests and checks need to be done.

## What do I need to bring with me?

The National Institute for Health and Care Excellence (NICE) recommends that you keep warm, before, during and after your operation because it can reduce side effects, complications and help you recover from your operation faster.[2]

Please make sure you bring socks and slippers, a dressing gown, a vest or other warm clothing to help you feel warm while you are in hospital. Please arrange for someone to collect your clothing and any items you will not need while you are in hospital, as storage space on the wards is limited.

Please bring in any new medicines that your doctor may have started after your pre-assessment visit. If doses of any other medicines change after your pre-assessment visit **you must** tell your nurse or doctor when you are admitted.

# Inguinal Hernia

## How can I prepare for my operation?

Before any operation it helps to try and get as fit as possible as this helps in your recovery.

If you are overweight, seek advice from your GP or practice nurse who will offer you support and dietary advice. Losing weight will help to reduce risks or complications during your anaesthetic and operation.

If you smoke, it is advisable that you stop. Smokers are more likely to develop chest infections or blood clots after surgery. We realise this can be difficult, however, your GP, practice nurse and staff on the ward, are able to offer you advice and support.

## What will happen while I am in hospital?

On admission to the ward, you will be introduced to your 'named nurse' who is responsible for planning your nursing care with you. Your named nurse is part of a team of nurses who are there to help and advise you, and to make your stay as comfortable as possible.

## What will happen before my operation?

When you arrive one of the nurses who will care for you will welcome you to the Access Lounge. They will re-check your details, taken at the pre-assessment clinic, to make sure nothing has changed.

You will be asked to complete a PROMs (Patient Reported Outcome Measures) questionnaire. You will answer questions about what your health and quality of life is like before you're your hernia is repaired. Approximately 3 months following your surgery, you will be sent a questionnaire to your home address to see if there has been any improvement in your quality of life since your operation. A pre-paid envelope will be provided for you to send this back.

You will be seen by one of your doctors, who will tell you the time of your operation and answer any questions you may have. Before your operation one of your doctors will again explain the reasons for your operation, the operation itself, and the precautions we take to avoid any risks or complications. When you fully understand the operation you will be asked to sign a consent form, if you have not already done so.

You will be asked to remove any jewellery you are wearing (except your wedding ring), contact lenses, make-up and nail varnish and also not to use any body lotions, deodorants and perfumes. You will be asked to put on a theatre gown.

False teeth, glasses and hearing aids may be removed in the operating theatre.

# Inguinal Hernia

You may be given a ‘pre-med’ (some tablets to help you relax).

Just before the time of your operation one of your nurses from the ward will go with you and transfer your care to a theatre nurse.

If you have any worries or concerns tell the staff, they are there to help and support you.

Your theatre nurse will check your details again before taking you into the anaesthetic room. In the anaesthetic room you will meet your anaesthetist again. He or she will give you your anaesthetic before you are taken to the operating theatre. If it below 36°C (96.8°F), the operation will not start until you are warm. A warm air blanket or jacket may be used to raise your temperature.

When in the operating theatre and the recovery room your nurse will take your temperature regularly. If it falls below 36°C (96.8°F), you will be placed under a warm air blanket or jacket.

Please tell your nurse or doctor if you feel cold during your stay in hospital.

Before and during your operation:

- a cannula (fine needle) will be placed in the back of your hand or arm so allow drugs to be injected. Sometimes, when drugs are injected they may feel cold and sting a little.
- an intravenous drip may be attached to your cannula, but this usually takes place when you are asleep.
- you may be asked to breathe oxygen through a face mask before you are given the anaesthetic.
- your blood pressure will be measured.
- your pulse will be taken, and the amount of oxygen in your blood will be measured by attaching a special clip to your finger. This does not hurt.
- your heart rate will be monitored by placing sticky pads on your chest. These are attached to some leads to show a tracing of your heart on a monitor. This is routine and is nothing to worry about.

## Why am I asked not to eat or drink before my operation?

Your nurse will tell you when **you must** stop eating or drinking before your operation. This is very important. **You must** follow the instructions. **Nothing means nothing at all (including water and chewing gum)**.

# Inguinal Hernia

If you forget and do eat or drink anything **you must** tell your doctor or nurse, as your operation may need to be postponed for your safety. This is because when you are unconscious, if your stomach contains food or drink you may be sick and it could get into your lungs, affect your breathing and cause an infection.

## What will happen during my operation?

You will have 1 - 4 small incisions (cuts) in your abdomen (tummy) to enable your surgeon to carry out the repair of your hernia through the keyhole method. If you have an open operation you will have one incision.

The wounds are closed using either dissolvable sutures (stitches) or by sutures which need to be removed by the practice nurses at your GP's practice. Your nurse will tell you which type you have.

The operation can take around 1 hour. This will depend on what needs to be done. Your doctor will discuss this with you before your operation.

## What will happen after my operation?

After your operation you will be taken to the recovery room. Not everyone remembers waking up in the recovery room. Specially trained nursing staff will look after you until you are ready to return to your ward.

If you have any pain or feel sick, let the recovery room nursing staff know. They will give you some medication to relieve it, so by the time you are transferred back to the ward you should feel comfortable.

## What will happen once I am back on the ward after my operation?

You will be made comfortable. Your nurse will check your blood pressure, pulse, temperature, pain level and wound. You will be encouraged to sit in a recliner chair and gradually mobilise to prevent complications such as DVT and chest infections.

You will be given surgical stockings to wear.

If at any time you are in pain or feel sick, please let one of your nurses know and they will give you medication to relieve it.

Your doctor or nurse will tell you when you can start to drink again after your operation. You will have an intravenous drip in your arm through which you will receive fluids to prevent you from dehydrating, until you are able to drink normally.

Your wounds will have dressings over them that allow you to bathe or shower from the day after your operation.

# Inguinal Hernia

You may have:

- discomfort from your wound sites. Taking painkillers at regular intervals works best, rather than waiting until you are in pain. It will also reduce the need to take stronger painkillers. Always follow the instructions provided in the leaflet supplied with your tablets.

- some nausea (feeling sick) or vomiting (being sick) due to the effects of the anesthetic. These will usually settle within 24 - 48 hours. It is important to drink plenty of fluids, **but not** alcohol, to avoid dehydration.

It is normal to feel tired for 24 - 48 hours after your operation.

A little bruising may develop around your wound sites, but this will clear.

## Will I be in pain after my operation?

After all operations some discomfort, soreness or pain is to be expected, so good pain relief is important. It helps you feel better and makes it easier to move around, take deep breaths and cough. This reduces the risk of any complications happening after surgery.

You will be offered pain relief in one or more of the following ways:

- painkiller through a needle in your hand or arm
- injections into your bottom
- painkilling suppositories into your rectum (back passage)
- tablets when you are able to drink again.

## How long will I need to stay in hospital?

One of your doctors or nurses will assess you later the same day and decide if you are well enough to go home that day. Some patients may need to stay for 24 hours after this operation. If you do need to stay overnight, you will be transferred to an inpatient ward.

Plans for your discharge from hospital will be discussed with you before any decisions are made. When you are ready to go home you will be given a copy of your discharge plan which gives details of any arrangements made for you, for example, if you need to see your GP practice or district nurse to have stitches removed or dressings changed. A copy will also be sent to your GP. Please ask your nurse if you need a fit note. Simple painkillers will be given to you to take home.

# Inguinal Hernia

## When can I have a bath or shower again?

During the first week after your surgery you are advised not to soak in the bath. This is to help avoid a wound infection. Showering is advised.

## When can I have sex again?

You may have sex again when you feel comfortable unless you have been advised not to by your doctor.

## When can I drive?

You may drive as soon as you feel comfortable and are able to carry out an emergency stop. You should check with your insurance company for their advice on driving after keyhole surgery.

## When can I return to work?

You may need to take 1 - 2 weeks off work. This will depend upon the type of work you do.

## When will I be able to exercise?

**You must not** do any abdominal exercises or heavy lifting for 6 weeks after your operation.

## What if I choose not to have surgery?

Your hernia may stay the same and not cause you any problems. You may decide to try using a truss to relieve your pain or discomfort. However, your hernia is likely to become steadily worse as time goes on. You may find lying down or putting gentle pressure on the swelling with your hand will relieve discomfort for a short while by reducing your hernia (pushing your bowel back into place).

As long as your hernia reduces it is not dangerous, but your pain or discomfort will continue if it is not repaired surgically.

If it cannot be reduced it may have become strangulated. If this happens you must seek urgent advice from your GP.

Some people have hernias for years but they must not strain or over-exert themselves, which may restrict their lifestyle.

# Inguinal Hernia

## Contact numbers

If you need further advice or have any problems please contact the appropriate number below:

## University Hospital of North Tees

If you experience any problems within 2 weeks following discharge from hospital please contact,

**North Tees Surgical Decision Unit**
telephone: 01642 624566 or 01642 624628

## Further information is available from:

**NHS Choices**
telephone: 111 (when it is less urgent than 999)
Calls to this number are free from landlines and mobile phones
or via the website at www.nhs.uk.

## References

1. National Institute of Health and Care Excellence (NICE) (2004), Final Appraisal Determination – Laparoscopic surgery for inguinal hernia repair NICE July 2004.

2. National Institute for Health and Care Excellence (NICE), 2016 Prevention and Management in Adults Having Surgery. Clinical guideline 65.

# Inguinal Hernia

This leaflet has been produced in partnership with patients and carers. All patient leaflets are regularly reviewed, and any suggestions you have as to how it may be improved are extremely valuable. Please write to the Quality Assurance Team, University Hospital of North Tees or email: patientinformation@nth.nhs.uk

**Comments, Concerns, Compliments or Complaints**

We are continually trying to improve the services we provide.

We want to know what we're doing well or if there's anything which we can improve, that's why the Patient Experience Team is here to help.

Our Patient Experience Team is here to try to resolve your concerns as quickly as possible. If you would like to contact or request a copy of our PET leaflet, please contact:

telephone: 01642 624719
Monday – Friday, 9.00 am – 4.00 pm
Messages can be left on the answering machine and will be picked up throughout the day.

freephone: 0800 092 0084
Mobile: (can use text): 0779 506 1883
Email: patientexperience@nth.nhs.uk

Out of hours if you wish to speak to a senior member of Trust staff, please contact the hospital switchboard who will bleep the appropriate person.

telephone: 01642 617617
24 hours a day, 7 days a week

The Patient Experience Team is available to discuss your concerns in person Monday – Friday, 1.30 pm – 4.30 pm. The office is based on the ground floor at the University Hospital of North Tees.

**Data Protection and use of patient information**

The Trust has developed a Data Protection Policy in accordance with the Data Protection Act 1988 and the Freedom of Information Act 2000. All of our staff respect this policy and confidentiality is adhered to at all times. If you require further information please contact the Information Governance Team.

telephone: 01642 833551 or email: information.governance@nth.nhs.uk

University Hospital of North Tees, Hardwick, Stockton-on-Tees. TS19 8PE
University Hospital of Hartlepool, Holdforth Road, Hartlepool. TS24 9AH

Telephone: 01642 617617 Fax: 01642 624089