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NHS
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Having your hernia repaired

Open and keyhole surgery options

General Surgery

Information for Patients

Last reviewed: March 2023
Next review: March 2026
Leaflet number: 484 Version: 3

Introduction

Your surgeon has offered to perform surgery to repair your hernia. We want to help you make the best decision for you about what treatment to have and what it would entail.

To help us to do this, please read the following information about the operation, the admission process and your discharge home after surgery. Most people go home the same day, but you must:

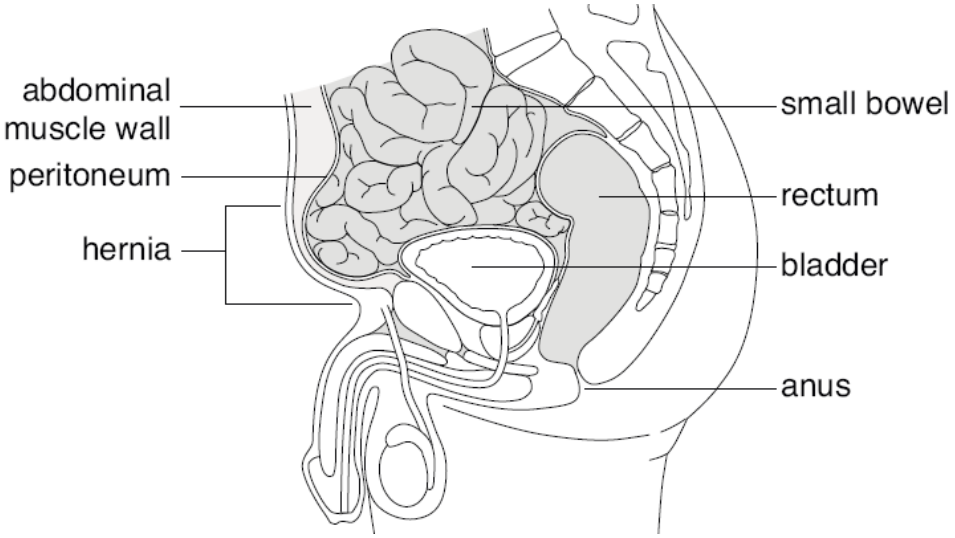
- be collected on the day of surgery by a responsible adult, who must take you home in a car or taxi after your operation.
- have a responsible adult at home with you for at least 24 hours and access to a telephone.
- not drive, cycle or operate machinery, sign important documents, make important decisions or drink alcohol for 48 hours.

What is a hernia?

An inguinal hernia is a weakness in the muscle of the tummy (abdominal) wall down in the groin. This allows part of your intestines or other organs to bulge forwards through the tummy wall.

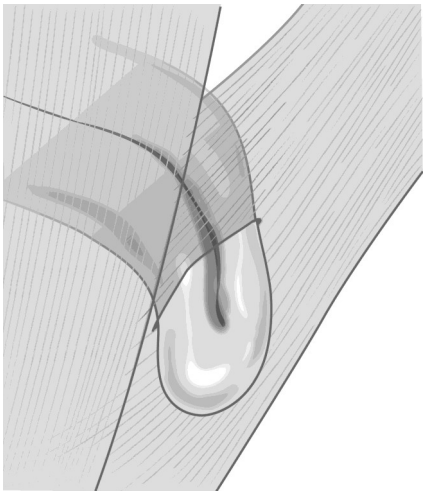
How is it repaired?

Repairing a hernia requires putting the tummy contents back into their normal position in the abdomen and strengthening the weakness in the abdominal wall using a mesh. This is either stitched or ‘tacked’ (using titanium coils) into place. The mesh is placed over the hole or weakness (a bit like repairing a puncture on a tyre).

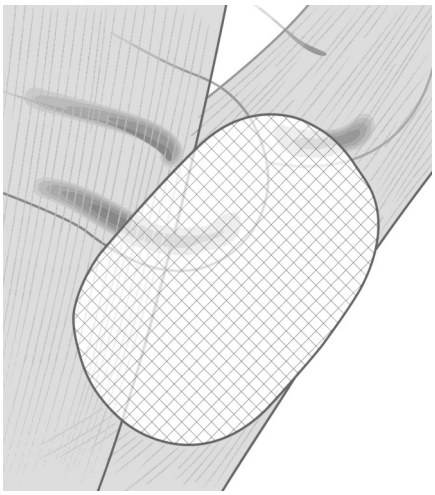


The mesh and coils will not rust or corrode and do not have to be removed. The mesh is left in the body and acts as a permanent barrier to prevent the hernia from returning.

There are two ways of repairing a hernia which is either via a small cut in the groin (an open repair) or via 3 small cuts in the abdomen (called a keyhole or laparoscopic repair). Your surgeon will discuss the advantages and disadvantages of both approaches and help you decide what is best for you.



Before (intestines protruding)



After (mesh repair)

What are the treatment options?

There are 2 main treatment options for an inguinal hernia:

1) Surgical repair
2) Watch and wait

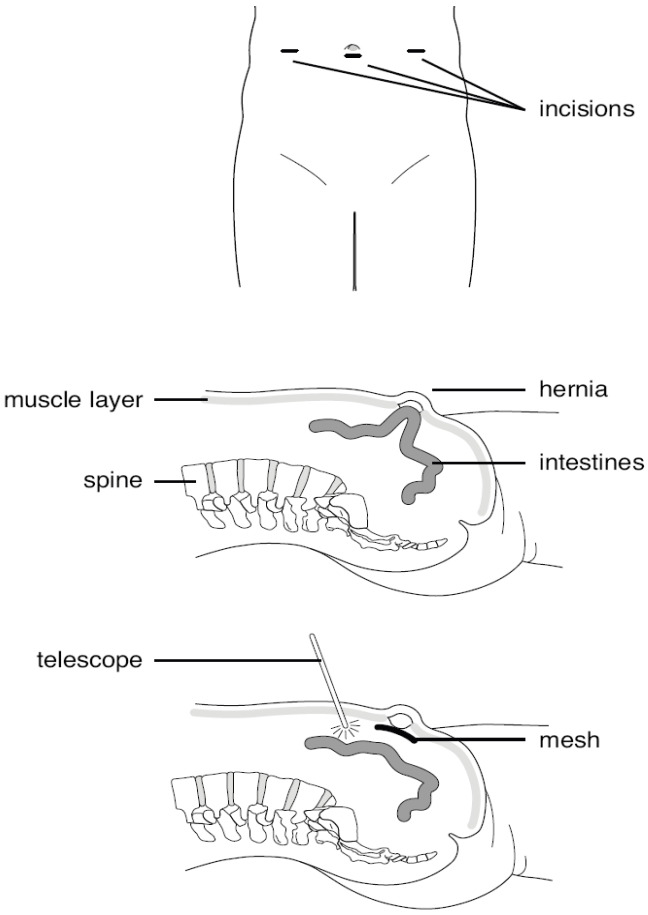
The hernia will not go away without surgery and there is also a small risk that bowel can become trapped in the hernia. This needs emergency surgery and can be a very dangerous situation but it is unusual. It happens in about 2 in every 1000 patients each year (0.2%).

Open hernia repair:

This involves making a small cut in your groin. The tummy contents are pushed back into the abdomen and the mesh is then secured. Open hernia repairs can be undertaken under local anaesthetic (unlike a keyhole repair). The risk of a wound infection is slightly higher with an open repair, but the risk of damage to the intestines is smaller than with a keyhole repair.

Laparoscopic or 'keyhole' hernia repair:

This operation is performed through small cuts made in your tummy (abdomen) under general anaesthetic (so you are asleep). One of these will be in the region of your tummy button. Two other tiny cuts are made either side of your tummy button. These cuts are called port sites. Hollow tubes are placed into the cuts and through these your surgeon passes instruments to perform the operation. Carbon dioxide gas is put into your tummy to allow the surgeon to see whilst they are operating.



Keyhole hernia repair is more suitable in patients with hernias on both sides of their abdomen. Recovery and return to work may be slightly quicker with a keyhole repair and the chances of having long-term pain is slightly lower.

The chance of having major intestinal or vascular problems is slightly higher.

Keyhole surgery is not suitable for some people, for example if you have a large hernia, or if you have had previous operations on your tummy.

The waiting time to have the operation is much longer for keyhole surgery as it is more specialised and fewer surgeons do it. Both approaches are effective and valid techniques used in hospitals up and down the country.

Are there any risks or complications involved?

Both types of hernia repair are very safe, however complications can happen and you must be aware of this before you agree to have the procedure.

During the operation:

- **Damage to testicular vessels** - In men, the sperm tube (vas) and blood vessels supplying the testicle are very close to the hernia. Together they form part of the spermatic cord. Although rare, it is possible to damage these blood vessels during the operation. This can cause a reduction in the amount of blood reaching the testicle, which may make the testicle shrink and stop working properly. This may result in a loss of the testicle in 1 in 50 patients. Injury to the tube carrying sperm may reduce fertility in 1 in 100 patients.

- **Damage to internal organs or blood vessels** - Sometimes, the bowel can be trapped or damaged during the operation. This happens in about 1 in every 1000 patients. This is usually recognised before you go home and treated. However, if you have severe abdominal pains, fever, severe vomiting or you feel unwell, please get medical help and contact the hospital or call 111 immediately. Contact details are on the last page.
- **Switching from keyhole to open surgery** - If you are having keyhole surgery, there is a chance that the surgeon will not be able to do the operation this way and will need to carry out a standard open hernia repair instead. This happens in about 1 to 1.5 in every 100 patients.

First 24 hours:

- **Difficulty passing urine** - Sometimes people find it difficult to wee. This happens more often in people who are older, or if you have prostate problems. If you cannot wee, we may pass a small plastic tube (catheter) into your bladder. This can be uncomfortable, but it does not need a general anaesthetic and we can do this on the ward. The catheter will be removed after 24 to 72 hours.

  If you have your operation at Loughborough, Melton or Hinckley hospitals you will be provided with a contact number to call if you have difficulty in passing urine after going home.

First week:

- **Readmission to hospital and return to theatre for another operation (e.g. to stop bleeding or treat a severe infection)** - To treat a complication of the surgery, sometimes people need to go back into hospital and a small number need another operation. About 7 out of 100 people go back into hospital within a month of surgery and 1 in a 100 have another operation.
- **Bowel disturbance** - Your bowels may be quite slow to work at first, especially if you have been taking some strong painkillers. It is important not to allow yourself to become constipated. Straining on the toilet changes the pressure inside the abdomen, and this should be avoided in the early days following your operation.
- **Bruising to groin/testicles** - Some patients notice that they are very bruised after the operation. This will start to appear a few days after your operation. This bruising is quite normal and will disappear. It may take a few weeks for all of the bruising to disappear.
- **Chest infection** - If you smoke, stopping about two weeks before your operation will help reduce the risk of an infection. Also, getting up and about as soon as you feel able is very important.
- **Blood clot in the lower leg (deep vein thrombosis or DVT)** - (Approximately a 1 in 500 chance). To reduce this risk, we may give you a blood thinning injection into your tummy before the operation. You may also be asked to wear special compression stockings which you should wear for the first week after surgery. It is important to check the skin on legs/ankles/feet to prevent skin irritation, breakdown or pressure sores. Stockings can move around throughout the day. Checking them regularly and smoothing out any wrinkles is very important. You will also be encouraged to get up and about after your operation as soon as the effects of the anaesthetic have worn off.

  For more information about reducing your risk of having a blood clot, search for leaflets 338 and 339 here: www.yourhealth.leicestershospitals.nhs.uk

First month:

- **Developing a lump** - Some patients notice a lump in the groin a few days or weeks after their operation. They worry that the operation has not been successful. It is most likely to be caused by a collection of fluid in the area where the hernia was originally. This is called a 'haematoma' or "seroma". This will usually disappear on its own within a few weeks.
- **Numbness of the skin** - Some numbness below the wound and at the top of the thigh can be quite common after the operation. It is not a cause for concern. The full return of normal sensation can take up to six months although very occasionally a small patch of skin will remain slightly numb.

Longer term:

- **Long term (chronic) pain** - Some patients feel discomfort for several years. 1 in 20 patients feel some pain and in half of these people, it is severe. It is thought that this is due to irritation of the nerves in the area by the healing tissue. The chance of this happening 1 year after the operation is:

  - Pain while resting: 5% (5 people out of every 100)

  - Pain when exercising: 9% (9 people out of every 100)

  - Pain bad enough to need treatment: 2% (2 people out of every 100)
- **Port site hernia** - After keyhole surgery, the tummy button repair can be an area of weakness and a hernia may develop there in the future. Another operation may be needed for this.
- **Another hernia (recurrence)** – The risk of your hernia coming back is about 1 in 100 after 5 years.

Are there any alternatives to the operation?

The operation aims to improve your quality of life. The decision about whether or not to have the operation is therefore a very personal one and will depend on how your symptoms affect your life.

Many people choose not to have the operation, particularly if is not causing them any symptoms. If you choose not to have the operation, you can always have it later if it does start hurting. About half of people who choose not to have the operation end up choosing to do so within the next 7 years.

There is also a very small risk of having a piece of bowel becoming trapped in the hernia. This needs an emergency operation which is dangerous for older people or people with other medical problems. The chance of this however is **low** (about 0.2% so much less than 1 in a 100).

You can wear a truss (support). These may be uncomfortable to wear, do not repair the weakness in your abdominal wall and do not control the hernia.

What happens before my operation if I choose to have it?

You will be seen in a pre-assessment clinic on a separate date before you come in for your operation. Please write down any questions about your surgery and ask the pre-assessment nurse or your surgeon before your operation.

Depending on your general health and your age, you may have had some tests carried out. These will have been looked at before your surgery. Please also bring in all the medication you are currently taking.

What do I need to do before my operation?

You will receive a letter with the date of your operation. This letter contains instructions that you must follow about not eating and drinking (fasting) for a set amount of time before your procedure.

You should:

- Follow your instructions about not eating and drinking. Not eating includes chewing gum and sucking sweets.
- If you are having day surgery, organise a responsible adult (over 18) to take you home in a car or taxi, and have a responsible adult to stay with you for 24 hours after your operation.
- Take your medicine as advised by the surgeon or pre-assessment nurse. Your pre-assessment nurse, or GP, will talk to you about when you should stop taking tablets like Warfarin, Clopidogrel and Aspirin before surgery. If your appointment is cancelled you should ask about when to re-start this medication.
- Read all the information leaflets that you have been given. These are also available here: www.yourhealth.leicestershospitals.nhs.uk
- If you smoke, you should stop 48 hours before your operation. The hospital is a 'smoke free environment'. This means you can not smoke in the hospital or outside in hospital grounds.
- Do not bring valuables into hospital, as we can not be held responsible for any loss or damage.
- Please remove all jewellery; any jewellery you cannot remove will be discussed at pre-assessment.
- Take a bath or shower using the shower gel if provided at pre-assessment.
- You do not need to shave the area, if needed this will be done during your operation.

What will happen on the day of my operation?

If you are ill, or cannot keep your appointment, please let us know as soon as possible. We may be able to book another patient in.

Operating lists can be a morning or afternoon list or an all day list so please be prepared to wait as it is not possible to tell you in advance which order the operating list will run in.

Please bring:

- A contact number for the person who is taking you home.
- Only bring an overnight bag if you have been told to at pre-assessment. Most people will go home on the day of their operation.

You will be admitted to the ward by a member of the nursing team. They will ask you a few questions and carry out some tests such as check your blood pressure, pulse and temperature. It may be necessary to do a pregnancy test. This will be discussed with you.

You will meet one of the surgical team who will check you have signed a consent form and go through the planned surgery. Please ask your surgeon if there is anything you do not understand.

You will also be visited by the anaesthetist or anaesthetic physician assistant. The anaesthetist is the doctor who will look after you when you are asleep. A physician assistant is a non-medically qualified practitioner trained in anaesthetics. The anaesthetic doctor will oversee your anaesthetic care.

You will need to change into a theatre gown and put on tight stockings which reduce the risk of a blood clot.

What happens after the operation?

After you have woken up in the recovery area you will be taken back to the ward. The staff will make sure you are comfortable and offer refreshments. If you have any discomfort or sickness please let the staff know so that they can help you. If you are on the day ward, you will recover on the ward until your nurse is happy that you are well enough to go home. You will need to eat and drink before you can go home, and pee (pass urine) depending on the type of surgery you have had. You will be given contact details for any questions you may have for the first 24 hours after discharge. If you have any problems after this time you should contact your GP or call 111.

There are 4 things you must not do for 24 hours after your general anaesthetic:

- Do not drive a car, ride a bike or operate machinery, including kettles, irons, etc.
- Do not carry children in case you feel dizzy.
- Do not sign legal documents or make important decisions as your judgement may be affected.
- Do not drink alcohol.

Wound care

You will have a dressing covering the wound(s). Dressings needs to stay in place for at least 24 hours if possible. Showering is safe, pat the wound(s) dry and re-apply dressing(s) if necessary. Avoid using antiseptic washes or perfumed shower gels over the wound(s). You should avoid soaking your wound in a bath until it has completely healed. The discharge letter will also explain how to manage your wound at home. The wounds may itch and there may be bruising. This is quite normal and will settle.

Tablets for pain

You will have some pain after your operation. If needed, pain killing tablets will be given to you when you go home. Take them regularly as prescribed for the first few days. If you run out of tablets you can take the empty box to your chemist who will let you know which tablets to buy, or you can arrange to see your own GP to get some more tablets.

Everyone is different; do not be surprised if you are still having some pain for a week or two, this is quite normal. Even though we appreciate it will be painful, everybody is encouraged to move around as much as possible after their surgery. It will help your recovery and may reduce your risk of long-lasting discomfort in your groin after surgery.

Please read the following points about painkillers:

- Take them when the pain starts. Don't wait for it to get really bad.
- Take before you go to sleep so you are able to rest.
- Take your painkillers as prescribed on your discharge letter, medication box or according to the leaflet supplied with the medication if taking your own supply. Be aware of any side effects.
- Take when you wake up, so they are working before you get out of bed.
- Painkillers can cause constipation, so you should drink plenty of water, and eat some high fibre foods like fruit, vegetables and cereals.

General advice

- **Driving** - The DVLA rules are that you must not drive until you can safely and comfortably do an emergency stop without wincing or flinching. This is usually about a week.
- **Work** - The length of time you need to be off work depends on what your job is. Most people will be able to return to light duties after 2 weeks, if your job involves heavy lifting you may need up to one month off work. Please discuss this with the doctor doing your operation or the nurse. If you need a fit note, please ask the nurse before your operation.
- **Sex** - You may return to your usual activities once you are comfortable. If you have any questions, please ask the pre-assessment nurse or the ward nurses.
- **Physical activity** - You should be walking the day after your operation and keeping mobile is important. However, do not do too much too soon. It is usual to feel some aches and pains for a few days or weeks (often up to a month). Don't do anything that strains your tummy muscles for at least a month.

If you are concerned about any symptom or problem at any time after you are sent home from hospital you should contact your GP or call 111. Alternatively, please ring the ward/ hospital where you had your operation.

Contact details

Leicester Royal Infirmary	(0116) 258 5164 (day surgery)
Leicester General Hospital	(0116) 258 4192 (day case 1)
	(0116) 258 8130 (day case 2)
Leicester Glenfield Hospital	(0116) 250 2490 (ward 24)
Loughborough Hospital	(01509) 564406
Melton Hospital	(01664) 854904
Hinckley Hospital	(01455) 441845

It would be helpful if you are able to tell them:

- The name of your consultant
- The operation that you had
- The date of your surgery
- Your hospital number

Please also make a note of the name of the person that you speak to for advice.

Patient agreement

I understand that if I do not follow the instructions about my operation it may be cancelled.

I have been given information leaflets and I have read and understood them.

I wish to have my operation done as a day case.

Are your discharge home arrangements in place? Yes ☐ No ☐

Patient signature: _

Nurse: _

Date: _

اگر آپ کو یہ معلومات کسی اور زبان میں درکار ہیں، تو براہِ کرم مندرجہ ذیل نمبر پر ٹیلی فون کریں۔
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If you would like this information in another language or format such as EasyRead or Braille, please telephone 0116 250 2959 or email equality@uhl-tr.nhs.uk

LEICESTER'S RESEARCH

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