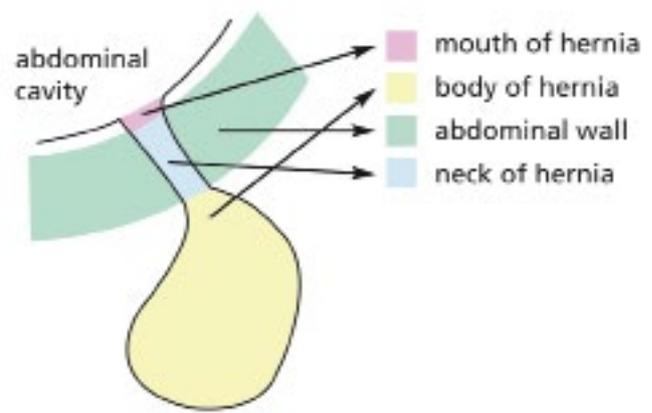


Hernia

Information for patients

What is a hernia?

A hernia occurs when the layers of muscle of the tummy wall split apart leaving a gap through which the contents of the abdominal cavity protrude (stick out). This is what the lump or bulge is at the site of your hernia.



What causes a hernia?

You can be born with a hernia or you can get one later in life. Sometimes it may happen following surgery.

What sort of trouble can hernias cause?

A hernia may cause no pain or discomfort at all, you may simply notice that there is a lump. Often the lump disappears when you lie down.

Some people feel discomfort, aching, or an actual pain at the area where the lump appears. This is often worse towards the end of the day, when you have been on your feet a lot. You may notice that this discomfort can be reduced/stopped by lying down and pushing and massaging the lump away (the contents of the hernia go back into the abdominal cavity).

How are hernias diagnosed?

Most hernias are diagnosed following a physical examination by a doctor. Occasionally, some hernias may need special tests like ultrasound scans or dye tests to confirm their presence.



Are there different types of hernias?

Yes. Hernias occur in several different areas of the body (see diagram below).

- **Inguinal hernias** (in the groin): these are the most common type of hernia. They are more common in men than women.
- **Femoral hernias** (in the groin): these are 10 times less common than inguinal hernias.
- **Umbilical hernias** (at the tummy button): these are also very common.
- **Paraumbilical hernias** (at the tummy button, but usually off to one side): these are also very common.
- **Epigastric/Ventral hernias** (these occur anywhere in a line between the bottom of the breast bone and the tummy button): quite common and usually occur in younger people.
- **Spigelian hernias** (at the side of the tummy): very rare.
- **Lumbar hernias** (in the flank): these are even rarer.
- **Incisional hernias**: hernias occurring in an old surgical scar.

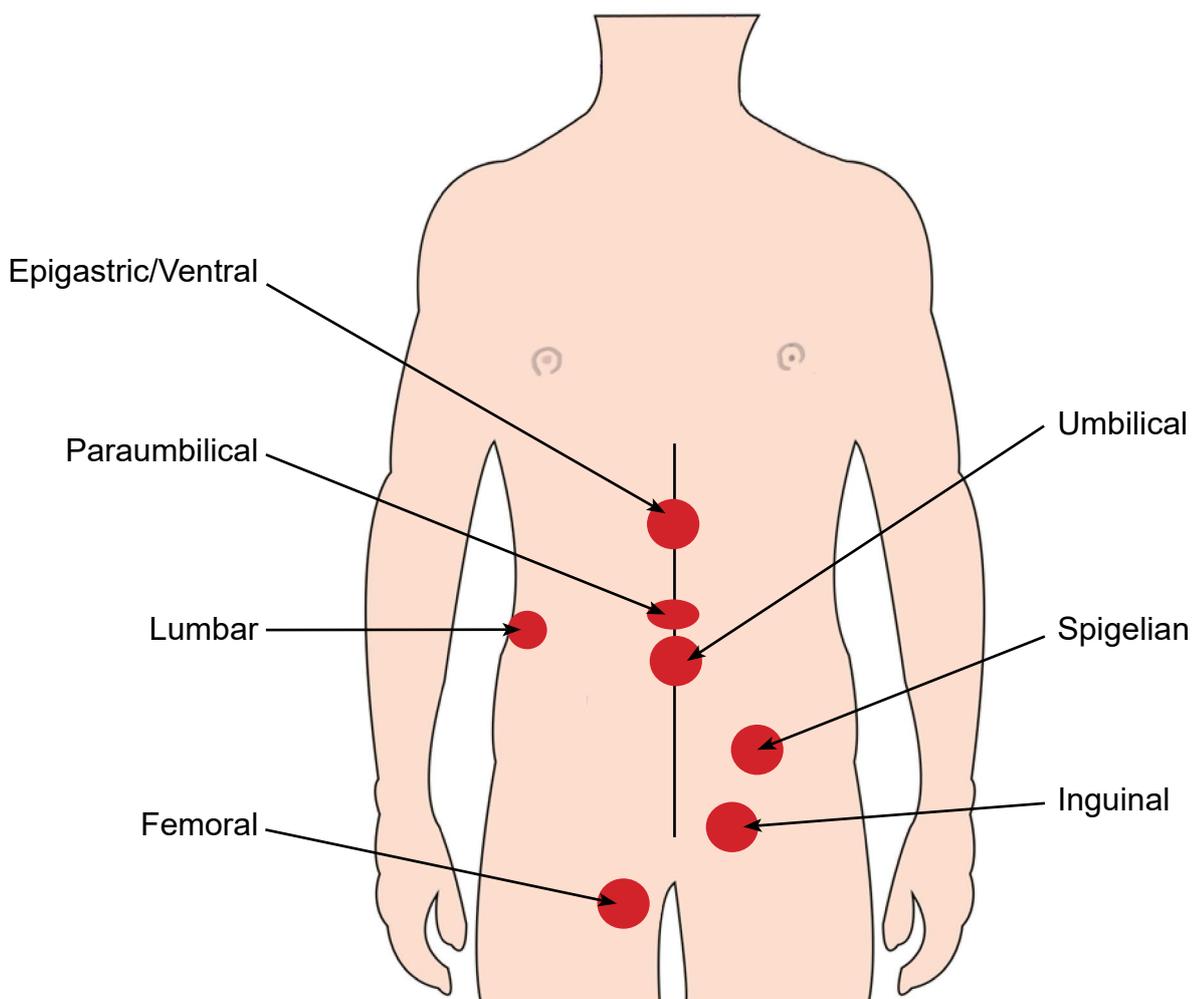


Diagram showing the different areas of the body where a hernia can occur

Can hernias develop complications?

Yes. Fortunately most hernias do not develop complications but remain simply as a lump, which may be painless or cause minor discomfort. However, complications can develop and some are listed below.

- **Irreducible:** this means that the hernia lump never goes away. This is most common with femoral and inguinal types of hernias. If you have a hernia which does not go away, you should have it looked at by a doctor. Particularly if the hernia lump becomes painful or you start being sick.
- **Obstructed:** this means that part of your bowel has become stuck within the hernia, blocking your bowel from passing food and fluid along. This will result in colicky pains in your tummy (like trapped wind, the pains come and go in waves) followed by vomiting. You will also notice that you have stopped passing wind from your back passage and your hernia lump is hard, often painful, and will not go away. If this happens you must immediately go to your GP or hospital Emergency Department.
- **Strangulated:** when this happens, it means that so much bowel or omentum has squeezed into the hernia through the gap in your muscles that it cuts off its own blood supply and the tissue in the hernia dies. This can happen in just a few hours, which is why it is called a surgical emergency. This is the most severe complication that a hernia can have. This causes severe pain at the site of the lump, sometimes followed several hours later by the skin over the lump becoming red and often a gripping pain in your tummy. This may progress to vomiting and a stoppage of all bowel activity (you stop passing wind from the back passage and your bowels do not work). If this happens you must go immediately to your GP or your nearest Emergency Department. Fortunately this is a very rare complication of a hernia.
- **Skin changes:** the skin overlying a longstanding hernia can become stretched and thinned. At its worst, an ulcer can develop.

What is a hernia repair?

To repair a hernia, the split in the muscle layer that has produced the gap needs to be repaired by closing the gap shut. This is done with either strong permanent internal stitches or by patching with an artificial permanent patch called a mesh.

Most hernias are now repaired with mesh. The mesh is made from synthetic (artificial) material (usually prolene). It is usually placed deeply within the layers of muscle, so that you are unaware it is there.

Do all hernias need to be operated on?

No. Some small hernias, which are not causing discomfort, can be left alone. Sometimes a small hernia will continue to grow and eventually after months but usually after several years, it may reach a size where it causes discomfort or is large enough to cause doctors concern that it could develop complications.

Should your hernia grow significantly larger, tell your GP who will send you back to see a surgeon.

Can there be complications of an operation to fix my hernia?

Yes. All operations carry a risk. There are general risks that are common to all operations.

- **Wound infection:** the skin around your wound may go red and painful or your wound may leak pus. Around one in 20 patients will have this complication usually after they are already at home. You should get your doctor or practice nurse to check your wound if this happens, as you may need antibiotics.
- **Bruising:** it is quite normal to have some bruising where your wound is. Often this does not appear until after you have gone home from hospital. Occasionally a very large bruise may form which takes one or two weeks to go away. The wound may ooze a little bit of blood or clear fluid for the first 48 hours, needing a change of wound dressing.
- **Haematoma:** this means a collection of blood. In hernia operations, this usually happens just beneath your wound, forming a lump. A large lump may take several weeks to go away. As it disperses, bruising usually appears. With keyhole surgery of groin hernias, the haematoma may appear in the area where your hernia lump was. It is important not to mistake this haematoma for a recurrent hernia.
- **Chest infection:** if you develop a cough or feel short of breath after your operation, you may have developed a chest infection. This is rare if you are fit and healthy. You are at high risk of this if you have a lung disease (such as chronic bronchitis, emphysema, or severe asthma) and moderate risk if you are overweight or are a smoker.
- **Internal bleeding:** this is rare (occurring in less than one in 1000 hernia operations) but you may need to have a blood transfusion or a second operation in order to stop the bleeding.
- **Allergic reactions to antibiotics or anaesthetics:** this is also rare (occurring in less than one in 100 operations). If you have had a previous bad reaction to an anaesthetic or any medication, you **must** tell the surgeon or the anaesthetist before your operation.
- **Blood clots in the legs:** this is also known as deep venous thrombosis (DVT). It carries the risk of the blood clot moving from your leg up to your lungs (pulmonary embolus), which can be a life threatening condition. A fit healthy person has a very small risk of DVT. Your risk is higher if you are overweight, a smoker, in poor general health, have difficulty walking, or have had a previous DVT. To reduce your chance of developing a DVT you will be encouraged to get out of bed as soon as you are sufficiently recovered from the anaesthetic. You may also be given an injection of a medicine called heparin, which is proven to reduce your chance of developing a large pulmonary embolus. While you are on bed rest, you should exercise your calf muscles by moving your feet up and down.
- **Ischaemic orchitis:** this is an extremely rare complication of inguinal hernia repairs in men. Here, the blood supply to the testis gets affected causing the testis to become painful and small and thus becoming non-functional. This is more common in patients undergoing repair of their inguinal hernias for the second time (one in 50 as compared to one in 1000 for the first time goers).

Complications due to the mesh itself

All types of mesh used to repair hernias are made of synthetic material that is not absorbed by the body but remains permanently in place. This is why they are so successful in repairing hernias. Rarely however, there can be problems related to the mesh itself.

- **Infection:** all meshes are sterilised and free of germs when they are put in. However, everyone carries germs on their skin, so there is a small risk that one of your skin germs could get on the mesh at the time of surgery and cause an infection. To further safeguard against this, you will be given antibiotics during the anaesthetic, while you are having your operation.

Mesh infection is a rare complication for hernia repairs performed as a planned operation, less than one in 200 patients having a hernia repaired will get a mesh infection. Once a mesh is infected, antibiotics may not get rid of the infection and you may need to have the mesh removed by further surgery. Having the mesh removed may result in the hernia coming back.

- **Bowel obstruction/bowel fistula:** this extremely rare complication can only happen if your bowel is in contact with the mesh. In many hernia repairs this contact does not happen. Even where a bowel is in contact with mesh, it is rare for this to cause a problem. Bowel can be in contact with the mesh in keyhole (laparoscopic) surgery of epigastric hernias, umbilical/paraumbilical hernias, and spigelian hernias.

Less commonly, bowel may come in contact with mesh in keyhole surgery of inguinal or femoral hernia repairs. Open hernia repairs where mesh may be in contact with bowel include ventral, epigastric, and umbilical hernias. It is extremely uncommon for mesh to get in contact with bowel in open hernia repairs of inguinal or femoral hernias.

Open inguinal mesh hernia repair can give rise to chronic pain in your groin. This can happen in up to one in 10 patients undergoing the operation. This is virtually unheard of in keyhole repair of inguinal hernias.

Can hernias come back?

Yes. The use of mesh has reduced the number of hernias that come back (called "recurrence" of a hernia). The risk of a hernia coming back is related to many factors.

- The type of hernia you have.
- The size of hernia (larger ones are more difficult to patch successfully).
- The hernia is recurrent (it has been repaired before but has come back again).
- If you are diabetic you heal less well.
- If you have an emergency operation.
- If you have a heavy physical job or routinely undertake extremely strenuous exercise.
- If you are on medication which impairs healing, for example steroids or cancer drugs.
- If you have a chronic cough.

Will my hernia be repaired by keyhole surgery?

This depends on what type of hernia you have, its size, and whether your surgeon is trained in keyhole (laparoscopic) surgery.

Keyhole surgery is simply a method of repairing a hernia through several small cuts on your tummy, rather than a single larger one. Both keyhole and open surgery aim to close or patch the gap in the muscles that is the hernia. Your surgeon will discuss with you which type of surgery they are planning to perform.

- Keyhole surgery may not be an option for some hernias.
- Keyhole surgery has to be performed under a general anaesthetic.
- Keyhole surgery always involves use of a mesh.
- Keyhole surgery generally gives less pain and has a quicker recovery after surgery compared to open surgery.
- Keyhole surgery has a slightly higher failure rate compared to the open inguinal hernia repair.

Your surgeon will be happy to discuss the option of keyhole surgery with you and advise you as to whether your particular hernia is suitable for that method of repair.

The National Institute for Health and Care Excellence (NICE) has assessed the benefits of keyhole versus open hernia repair only for inguinal hernias. They concluded that inguinal hernias which have come back after a previous repair (recurrent inguinal hernias) and bilateral inguinal hernias (having a right and left sided hernia at the same time) should be mesh repaired laparoscopically. They have also concluded that patients with a single inguinal hernia should be offered the choice of open or laparoscopic surgical mesh repair.

Are there any disadvantages specific to keyhole surgery?

Yes. Keyhole surgery involves placing hollow metal tubes the width of a pencil or larger, through the muscle of your abdominal wall. This muscle protects the contents of your abdomen (such as bowel and bladder) from harm and on rare occasions these metal tubes may unintentionally puncture something. This is a rare complication. This damage is usually identified at the time it happens and is repaired, although it may prevent your operation from being completed.

Less commonly, damage is not seen at the time of your operation, but you become unwell in the hours or days following your surgery. This alerts the doctors looking after you to the fact there is a problem. If this happens, you may need major surgery to correct the problem.

How soon can I go home after my operation?

To be able to go home you must be able to drink, eat light meals, walk about comfortably, and pass urine normally. Sometimes a patient booked in for day surgery has to be kept in overnight because they cannot achieve all of these.

Your surgeon will have given you an estimate of how long you will be in hospital at your clinic visit.

How will I feel after my surgery?

Most people need to take tablet-type painkillers after their operation. If you have had keyhole surgery these may only be needed for a few days, but if you have an open operation you may need to take them for longer.

Everyone is different when it comes to pain after an operation, so we can only give you an estimate about how you will feel.

Will I need to have somebody to look after me at home?

After day surgery, you should have a responsible adult stay with you for 24 hours. Many people feel tired and woozy after a general anaesthetic, so someone able to look after you by making hot drinks and light meals is helpful. They can also phone the hospital for you if you have an unexpected problem.

After the first 24 hours, it is helpful to have someone do your shopping or run errands for you, until you are fully mobile.

What will I be able to do when I go home?

It is normal to feel tired and a bit sore for several days. You should rest and eat only light meals for the first day or two. Avoid any alcohol while taking painkillers stronger than paracetamol.

You may find your bowels are constipated; this is as a result of missing normal meals around the time of your surgery and is also a side effect of many painkillers. It should settle by itself, but if not you can use a gentle laxative that you can buy from any chemist.

You may not feel like leaving the house for the first couple of days, but make sure you walk about within the house or around the garden every couple of hours during the day. This keeps the blood circulating in your legs and reduces the chance of a blood clot forming in your legs.

If you feel sore you should take your painkillers regularly so you can move about. If you are still feeling sore and need painkillers after you have finished the supply provided by the hospital, contact your GP for a further supply (this is rarely necessary).

Younger people will usually return to normal more quickly than an older person.

What should I do with my wound(s)?

The nurses on the ward will explain this to you in detail before you leave hospital.

Most surgeons use skin stitches which go away by themselves and your wound will be covered by a light dressing. After 48 hours wounds are usually sealed enough for you to have a shower. You may have a bath seven days after your surgery if your wound is clean and dry.

It is normal for your wound to feel hard and tender for several weeks. It is also quite normal for you to feel a lump under your wound, as this is the healing ridge of tissue. The actual scar itself will appear red and often remains red for many months.

If the skin around your wound develops redness extending more than one inch (2cm) from your scar and this does not go away within 24 hours of you noticing it, you should contact your practice nurse, as you may be developing a wound infection.

When will I be able to go back to work?

This depends on the type of work you do and the type of hernia you had. You can usually return to a desk job after a week or two. A heavy manual job will need longer off work, usually around four weeks.

When can I start to drive again?

You must not drive within 24 hours of a general anaesthetic. It is also recommended that you do not drive while on strong painkillers, as they may make you sleepy. Otherwise, once you can comfortably use all the controls in the car, it is safe to drive. This means being able to perform an emergency stop and being able to turn round in your seat to safely reverse your car. Most people find they need a week to recover enough to drive safely.

It is always best to check with your insurance company to see if they have any specific rules related to the type of operation you have had. This is particularly important for professional drivers.

When can I start to exercise again?

Doctors opinions vary about this, because of a lack of any detailed study into this question. Your surgeon will be able to give you their opinion related to your specific type of hernia and the type of sport you have in mind.

Will I have a follow-up appointment?

This varies from surgeon to surgeon. Most surgeons do not see patients after a hernia repair, as most patients make a straightforward recovery. If you have problems your GP can refer you back to see your surgeon if they have any concerns.

Is it possible to be too unfit for hernia surgery?

Yes. This is usually because of heart problems or lung problems, but a variety of health conditions can make somebody have such a high risk of dying with surgery, that the surgeons will advise them not to have surgery. We may also have an anaesthetic doctor examine you to help us decide whether you are fit for surgery or not.

If you still wish to have the operation, you should ask for a second opinion from another consultant surgeon. We will arrange this or we will ask your GP to arrange it for you.

In certain circumstances, if your hernia is producing symptoms but is not too big and you are unfit to have general anaesthetic, the hernia can be repaired under local anaesthesia.

Is there anything I can do to improve my health before having surgery?

Yes.

- If you are a **smoker** you should stop as far in advance (at least six weeks) of your surgery as possible (smoking increases the risk of a chest infection after an anaesthetic).
- If you are **overweight**, you should try and lose weight, to get down to your target weight for your height. Your GP may have a practice nurse who can help you with a weight loss diet.
- If you are **diabetic** you need to keep your blood sugar levels in the correct range.
- If you have **high blood pressure** it needs to be well controlled before you can have surgery.

This leaflet has been produced with and for patients

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