

Open Inguinal Hernia Repair

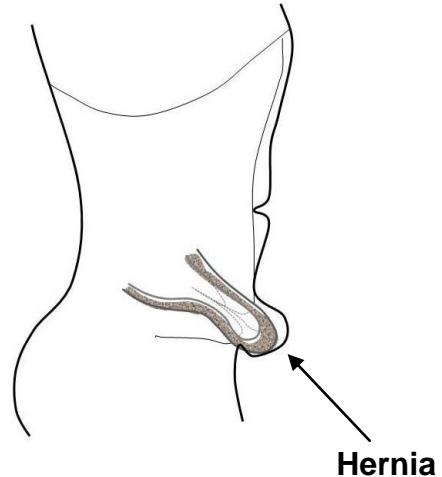
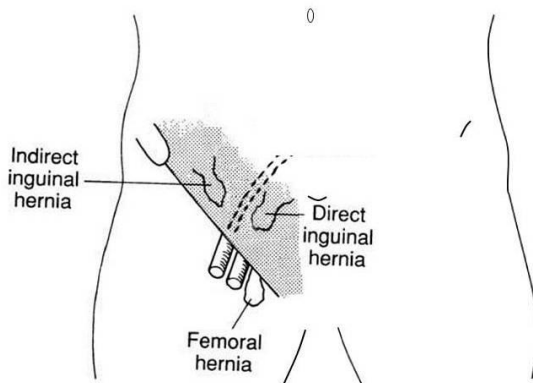
What is an Inguinal Hernia?

- An inguinal is a bulge which appears in the groin, when the inside layers of the abdominal muscle have weakened.

The weakened area of the abdominal wall stretches out to form a small balloon-like sac. This may allow a loop of intestine or abdominal tissue to push into the sac.

A hernia can cause discomfort in groin and other potentially serious problems, such as strangulation of bowel that could require emergency surgery.

- Hernia can occur in both men and women.
- You may be born with a hernia (congenital) or develop one over time.
- A hernia is a result of mechanical defect and does not get better over time, or go away by itself.



How do I know if I have a hernia?

- Groin is a common area to have hernia.
- It is often easy to recognize a hernia.

You may notice a bulge under the skin. You may feel pain when you lift heavy objects, cough, strain during urination or bowel movements, or during prolonged standing or sitting.

- The pain may be sharp and immediate or a dull ache that gets worse toward the end of the day.
- Severe, continuous pain, redness, and tenderness are signs that the hernia may be entrapped or strangulated.

These symptoms are cause for concern and you should contact your doctor for immediate referral to a surgeon.

What causes a hernia?

The wall of the abdomen has natural areas of potential weakness.

Hernias can develop at these or other areas due to heavy strain on the abdominal wall, aging, injury, an old incision or a weakness present from birth.

Anyone can develop a hernia at any age. Most hernias in children are congenital. In adults, a natural weakness or strain from heavy lifting, persistent coughing, and difficulty with bowel movements or urination can cause the abdominal wall to weaken or separate.

What can be the complications of inguinal hernia?

Bowel can come out in inguinal/groin hernia and has a risk of blockage with possible strangulation, if it cannot be pushed back in easily.

This is an emergency and requires surgery, as it can be a life-threatening situation. Sometimes abdominal fat (omentum) can get stuck and be strangulated, causing pain and infection.

How do you treat inguinal hernia?

Most hernias are treated with surgery as there is a small risk of strangulation of bowel or fat, which protrudes out in the hernia bulge.

The risk is higher in hernias with narrow opening. With very large hernias, the risk is lower, although if a lot of bowel comes out and stays stuck outside then, again risk of blockage of bowel is high, which can progress to strangulation.

A planned operation for a known hernia is better than an emergency one in terms of complications after surgery.

Are there any alternatives?

Sometimes patient is not fit to have surgery due to age and frailty or due to severe medical problems and reduced mobility.

In this instance a truss (belt with external pressure cup) can be used to prevent from bowel protruding out in the hernia bulge.

Laparoscopic (Keyhole) surgery

Laparoscopic or key-hole surgery is most useful for people with bilateral or recurrent hernias.

Some people may wish to choose key-hole surgery so that their post-operative recovery is quicker, allowing them to go back to work earlier.

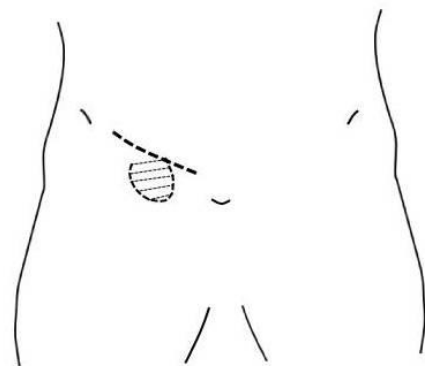
Please discuss with your surgeon regarding this option if indicated or preferred.

Open surgery

This is the standard approach for groin hernia surgery. Surgery can be done under local anaesthetic or general anaesthetic.

Local anaesthetic is much less riskier than general anaesthetic and is recommended if possible. In some patients local anaesthetic is not suitable.

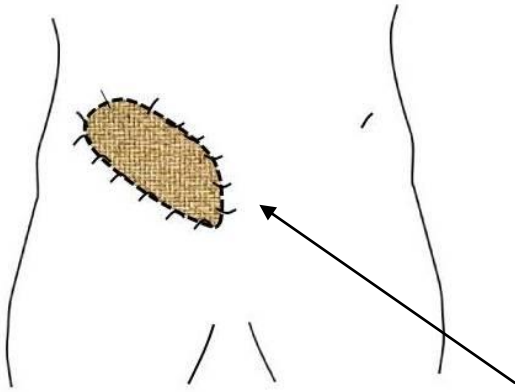
Patients should discuss the advantages of a particular anaesthetic approach over other with their surgeon to suit their needs.



In the open operation, a cut is made in the groin. Skin and muscle layers are divided to identify the hernia.

The contents of the hernia (usually a part or segment of protruding bowel or fat) are replaced back in the abdomen.

The defect is identified and repaired with a piece of synthetic material called as mesh. This is non-absorbable and helps provide the framework for scar tissue to grow into and form a solid wall over the area of defect, preventing herniation.



Mesh

The muscle layers and skin cut are stitched back to close the wound. Dressings will be put on the wound, which stay on for about 5 days.

What can I do to help make the operation a success?

Lifestyle changes

If you smoke, try to stop smoking now. There is strong evidence that stopping smoking several weeks before general anaesthetic reduces your risk of getting complications.

If you are overweight, losing weight will also reduce our risk of developing complications. If you need help to stop smoking or lose weight, ask a member of the healthcare team or your GP for advice.

Medication

You should continue your normal medication unless you are told otherwise. You should inform your surgeon if you take **aspirin, warfarin or clopidogrel**.

Follow your surgeon's advice about stopping these medications before your operation.

What complications can occur?

The healthcare team will try and make your operation as safe as possible. However, some complications can happen, some of these can be serious and can even cause death.

You should ask your doctor if there is anything you don't understand. Your doctor may be able to tell you if your risk of complications is higher or lower for you.

The complications fall into three categories.

1. Complications from anaesthesia
2. General complications of any operation
3. Specific complications for this operation

1) Complications from anaesthesia

Your anaesthetist will be able to discuss with you the possible complications of having an anaesthetic.

2) General complications of any operation

- **Pain** – It is normal to have pain after surgery. The healthcare team will try and reduce your pain by giving you medication to control it.

It is important you take your medication as advised so that you can move about and cough freely. You may also notice that you have a slightly sore throat.

This is due to the 'breathing' tube which is placed in your throat during surgery and should subside in a day or two.

- **Bleeding** – During or after surgery. This occasionally requires blood transfusions or further surgery.
- **Infection in the surgical wound** – This may require treatment with antibiotics or occasionally further surgery.
- **Blood clots** – In the legs (deep vein thrombosis/DVT) clots can form due to sluggish or abnormal circulation of blood. This causes leg to swell up and become painful.

The clots can rarely move through the bloodstream to the lungs causing

a pulmonary embolism (PE), making it difficult for you to breathe.

The nurses will encourage you to mobilise soon after surgery and may give you injections to reduce the risk of blood clots.

3) Specific complications for this operation

1. Nerve injury

There are superficial nerves running under the skin and in the muscle layers, which supply the skin around the groin area.

These may in advertently (occasionally deliberately) divided during surgery. This may result in numbness in the area after surgery.

In the long term the symptoms either go away or become too insignificant to be noticeable.

2. Chronic groin pain

Sometimes the superficial nerve-s can get caught in the scar tissue of surgery and can cause very focal or localised pain in one spot over groin.

This happens occasionally and may need treatment.

3. Bowel injury

This is extremely rare and may need a different approach with surgery to repair.

4. Mesh infection

This is an uncommon complication. This usually manifests a few days or weeks after surgery in form of persistent pus discharge from the hernia operation wound (very rarely away from main wound).

This requires surgery to remove the infected mesh and antibiotics. Sometimes the wound is left open after removal of mesh and takes a

few days to heal properly.

5. Recurrence

The risk of the hernia coming back is about 2 patients in 100 procedures. An alternative approach may be required for repeat surgery.

How soon will I recover?

1. In hospital

Following your operation you will be transferred to the recovery area and then to the ward.

You should be able to go home later that day or the following day. However, your doctor may recommend that you stay a little longer.

2. At home

- **Returning to normal daily activities** – After a week or so you should be able to resume most of your normal daily activities.

It is normal to feel tired after surgery, so take some rest, two to three times a day and try and get a good night's sleep.

You should avoid heavy lifting and vigorous exercise for at least two weeks.

- **Driving** – You should not drive for at least one week.

Before driving you should ensure that you can perform a full emergency stop, have the strength and capability to control the car, and be able to respond quickly to any situation that may occur.

Please be aware that driving whilst unfit may invalidate your insurance.

- **Returning to work** – You can return to work as soon as you feel well enough.

This will depend on how you are feeling and the type of work you do. Typically you will need between two and three weeks off work.

- **Eating** – There are no dietary restrictions following hernia surgery and you may resume to a normal diet within 4 hours after surgery.
- **Bowels** – Sometimes codeine based pain killers can slow down normal bowel movement.

If you have not had a bowel movement in three days following surgery, a mild laxative should help. Your local chemist should be able to advise you.

Remember to drink plenty of fluids so that you don't get dehydrated.

When should I seek advice?

- If you have a discharge of blood or pus from your wounds.
- If you develop a temperature above 38.5C
- Vomiting that continues for more than three days after surgery
- Inability to have a bowel movement after four days
- Persistent pain not relieved with your prescribed painkillers
- Persistent abdominal distension (bloating of your stomach)
- Increasing pain or swelling around your wounds



If you require a special edition of this leaflet

This leaflet is available in large print, Braille, on audio tape or disk and in other languages on request. Please contact:

Tel No: 0151 529 2906

Email: interpretationandtranslation@aintree.nhs.uk