

Laparoscopic Inguinal Hernia Repair

Brief description:

- This is a key-hole technique for repairing groin hernias. It uses a mesh technique very similar to the standard open operation but instead of a cut in the groin you have three small stab wounds after the operation.
- Here, we explain some of the aims, benefits, risks and alternatives to this procedure (operation/treatment). We want you to be informed about your choices to help you to be fully involved in making any decisions.
- Please ask about anything you do not fully understand or wish to have explained in more detail.

What is an Inguinal Hernia?

An inguinal hernia is an abnormal protrusion through the abdominal wall into the groin. The protrusion contains a cavity (the hernial sac) which can be empty or it can fill with abdominal contents such as bowel. Typically hernias are more obvious when standing or straining (for example coughing, heavy lifting, digging) as this forces the bowel into the sac. Hernias usually develop over time for no obvious reason, although in some people there may be an inborn weakness in the abdominal wall. Occasionally a strenuous activity will cause a lump to appear suddenly. They may occur at any age and are more common in men than women.

Hernias may simply present as a painless bulge that enlarges with standing or coughing. Commonly though they cause an aching discomfort or a dragging sensation. Occasionally a piece of bowel or fat can get stuck and twisted within the hernia. This is very painful and can lead to a strangulated hernia which is a life-threatening emergency. It is generally recommended, therefore, that hernias be repaired to prevent such complications arising

Is the laparoscopic technique better than the standard technique for my hernia?

The National Institute for Health and Clinical Excellence (NICE) has recommended that patients with two hernias (i.e. one in each groin) or those with recurrent hernias should have their repairs performed by this technique. In addition, NICE now recommends that laparoscopic repair should be discussed with all patients presenting with an inguinal hernia. However, because the amount of cutting used in this operation is less than the standard open technique, recovery after laparoscopic surgery is quicker. Most patients are back to their normal activities within 10 to 14 days. Many patients return to work within seven days of surgery.

What alternative procedures are available?

The standard hernia operation involves placing a mesh on the outside of the weak area in the groin through a 10cm cut overlying the hernia. It can be performed under a general or local anaesthetic. There is a slightly longer recovery period due to the bigger cut and also a greater risk of chronic pain in the groin from damage to the nerves there. Details of this can be discussed with you by your specialist.

Are there any disadvantages of having the laparoscopic operation compared with the open technique?

The only slight drawback is that you need to have a general anaesthetic. For most patients this is not an issue and modern anaesthetics have very low risks. However, if you are a patient with particular risk factors for getting complications from anaesthetics it may not be appropriate for you to have this technique. For patients who have had previous cuts in their abdomens, particularly below the tummy button this technique may not be possible.

Surgery for Inguinal Hernia

Hernia surgery usually requires an overnight stay in hospital.

Before your operation

- You will attend a pre-admission clinic where you will be seen by a member of the team who will be looking after you in hospital. You may also need to be seen by an anaesthetist.
- At this clinic, we shall ask you for details of your medical history and carry out a physical examination. We will arrange any investigations and tests you require. This is a good opportunity for you to ask us any questions about the procedure, but please feel free to discuss any concerns you might have at any time.
- You will be asked if you are taking any tablets or other types of medication - these might be ones prescribed by a doctor or bought over the counter in a pharmacy. It helps us if you bring details with you of anything you are taking (for example: bring the packaging with you).
- If you are taking any tablets or other forms of medication, you should tell the doctor or nurse you see.
- It is very important that you tell us if you are allergic to any medications or dressings.
- You will be admitted on the day of your operation.
- Before your operation your anaesthetist will review your medical history. In particular, you will be asked about your medications and any health problems that you have. They will also ask you about previous anaesthetics you have had and whether you had any problems with these (for example, nausea). You will be asked if you are allergic to anything. They will also want to know about your teeth, whether you wear dentures, have caps or a plate. Your anaesthetist may examine your heart and lungs.
- Occasionally you may be prescribed medication that you will be given shortly before your operation – this is known as 'the pre-medication' or 'pre-med'. They relax you and may send you to sleep

During the operation

- Before your procedure, you will be given a general anaesthetic. This is usually performed by giving you an injection of medication intravenously (i.e. into a vein) through a small plastic cannula (commonly known as 'a drip'), placed usually in your arm or hand.
- While you are unconscious and unaware your anaesthetist remains with you at all times, monitoring your condition and controlling your anaesthetic. At the end of the operation, your anaesthetist will reverse the anaesthetic and you will regain awareness and consciousness in the recovery room, or as you leave the operating theatre.
- The operation involves an incision by your umbilicus and two further incisions. The incisions are about 1cm long each. Through these, we inflate your tummy up with carbon dioxide gas which is completely harmless.
- We place a sheet of Prolene mesh, which does not dissolve, into the space directly behind the weak area in the groin. This prevents the bulge of the hernia from returning. It is strong immediately and does not require long periods of convalescence. The mesh is made of the same material as stitches we commonly use in other operations and does not cause any reaction from your body. You will not be aware that it is there.
- At the end of the operation, before you wake up, all the puncture sites in your abdomen will be treated with local anaesthetic so that when you first wake up there should be very little pain. Some patients have some discomfort in their shoulders, but this wears off quite quickly.
- The cuts we have made will be covered with small waterproof dressings.

After the operation

- After your operation, you will wake up in the recovery room. You might have an oxygen mask on your face to help you breathe. You might also wake up feeling sleepy.
- You will have a small, plastic tube in one of the veins in your arm attached to a bag of fluid called a drip.
- While you are in the recovery room, a nurse will check your pulse and blood pressure regularly. When you are well enough to be moved, you will be taken to a ward.
- Sometimes, people feel sick after an operation, especially after a general anaesthetic, and might vomit. If you feel sick, please tell a nurse and you will be offered medicine to make you more comfortable.
- **What are the wounds like?** They will be closed with dissolvable stitches under the skin and have a see-through shower-proof dressing on them. These should be left on for five days after which they can be removed and the wounds left open to the air.
- **Will I have much pain?** Immediately as you wake up from the surgery there will be very little pain as all the wounds are full of local anaesthetic. As this wears off you will have some discomfort and a pulling sensation around the tummy button wound. This will last between seven and fourteen days. We give you a pack of pain-killers which we advise you to take for the first three days regularly, regardless of whether you have pain or not.
- **Eating and drinking:** You will be able to drink immediately after the operation and if this is all right and you do not feel sick then you will be able to eat something.
- **Getting around and about:** After your operation we will try to get you mobile (up and about) as soon as you are comfortable. You will be allowed home when you are comfortable, have had something to drink and eat and have passed urine.
- **When you can resume normal activities including work:** After surgery the only limitation that you will have is the discomfort from the three small stab incisions. Most people who have had this procedure can resume normal activities after two weeks. However, you might need to wait a little longer before resuming more vigorous activity. When you will be ready to return to work will depend on your usual health, how fast you recover and what type of work you do. You will be given a certificate to cover the time off work you require.
- **Check-ups and results:** You will be phoned at home by a senior nurse to check up on your recovery in the week after your operation

Intended benefits of the procedure

- To repair your hernia.

Is there a guarantee that the operation will be complete by the key-hole technique?

- No. Unfortunately, there is never a guarantee that key-hole surgery will be possible. Occasionally there are technical reasons why conversion to an open technique is necessary. This is, however, unlikely.

Will my hernia ever come back?

- There is no method of hernia repair that can give a 100% guarantee that you will never develop another hernia in the same place after your operation. Fortunately, recurrence after hernia surgery should be rare. The lowest reported risk is with the mesh repair technique we use and is about one to three cases per hundred.

Serious or frequently occurring risks

- Like all surgery there are some risks involved with Laparoscopic inguinal hernia repair. However, this is a safe procedure and the risks of serious complications are very low.
- The risks relate to both the anaesthetic and to the actual surgery itself. So long as you are fit the anaesthetic should not pose any significant concerns but this should be discussed with your anaesthetist.
- All incisions have a small risk of causing bleeding and bruising and this operation is no exception.
- Any bruising that occurs tends to track down into the scrotum in men and can look rather worrying. Do not be alarmed if this happens to you, it will resolve spontaneously over two to three weeks.
- Significant bleeding after your operation is very rare – if this were suspected, you would require further surgery to ensure bleeding had stopped.
- Keyhole surgery inside the abdominal cavity is associated with a very small risk of damaging other structures inside the abdomen. These include the bowels (or intestines) and the major blood vessels (arteries and veins) to your legs.
- Hernias in men develop very close to where the major structures to and from the testicle lie. These structures include the blood vessels to the testicles (arteries and veins) and the vas deferens that carries the sperm from the testicle. Hernia repair, whether carried out as a keyhole or open procedure is associated with a very small risk of damage to these structures. This can lead to development of pain in the testicle post-operatively.
- Wound infections can occur during the recovery period and if any of your wounds become red and sore you should see your family doctor in case you need a course of antibiotics. You will be given a dose of antibiotics intravenously during surgery to try and prevent this.
- There is always a risk of recurrence with all hernia repairs but this should be no greater than about 1-3%. Patients who are obese have a greater risk of recurrence. The risk of long term pain in the wounds or the groin is very small with this technique.

What are the risks of general anaesthesia?

In modern anaesthesia, serious problems are uncommon. Risks cannot be removed completely, but modern equipment, training and drugs have made it a much safer procedure in recent years. The risk to you as an individual will depend on; whether you have any other illness, personal factors (such as smoking or being overweight) or surgery which is complicated, long or done in an emergency. Please discuss any pre-existing medical condition with your anaesthetist.

Very common and common side effects (1 in 10 or 1 in 100 people)

Feeling sick and vomiting after surgery, sore throat, dizziness, blurred vision, headache, itching, aches, pains and backache, pain during injection of drugs, bruising and soreness, confusion or memory loss.

Uncommon side effects and complications (1 in 1000 people)

Chest infection, bladder problems, muscle pains, slow breathing (depressed respiration), damage to teeth, lips or tongue, an existing medical condition getting worse, awareness (becoming conscious during your operation).

Rare or very rare complications (1 in 10,000 or 1 in 100,000)

Damage to the eyes, serious allergy to drugs, nerve damage, death, equipment failure.

Information and support

If you have any questions or anxieties, please feel free to ask your surgeon. Please let us know if we need to cancel any appointments for any reason (including illness) so your 'slot' can be used by others.