

## Laparoscopic Surgery for Inguinal Hernia Repair

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## What is an Inguinal Hernia Repair?

A hernia is a weakness in the lining of the abdomen (tummy).

This weakness may allow a part of intestine (bowel) or fat to bulge out under the skin. The most common site for a hernia is in the groin (the area between the thigh and the tummy). This hernia is called an inguinal hernia.

An inguinal hernia can occur on either the right or left side or both sides. The bulge may appear during vigorous activity, or when coughing or straining, and usually disappears when lying down. The bulge is usually seen or felt in the scrotum, groin or abdominal wall.

## What is a Laparoscopic Inguinal Hernia Repair?

The word "Laparoscopic" is the medical term for keyhole surgery.

Three or four little cuts are made in your tummy and tiny tube-shaped instruments are passed into these incisions.

The first tube (known as a Laparoscope) is connected to a high intensity light and a video camera so that the surgeon can see what is happening inside you.

The surgeon then uses long miniature instruments to return the protruding tissue back into the abdominal cavity.

To provide space for the surgery to be performed, your tummy is filled with carbon dioxide (a harmless gas).

A piece of mesh (a strong, but flexible man-made material) is inserted over the weak area in the abdominal wall to strengthen it.

The mesh remains inside the body permanently to reinforce the weak area.

Once the operation is completed, the carbon dioxide gas is allowed to escape before the cuts are stitched together.

## **Are there any alternatives to Laparoscopic Hernia Repair?**

An alternative to laparoscopic hernia repair is a traditional “open” hernia repair. This involves an incision about three to four inches long in the lower tummy or groin.

Both laparoscopic and open hernia repair can be performed as day case surgery (home same day).

## **Am I a suitable candidate for laparoscopic surgery?**

Laparoscopic surgery is not suitable for everyone, particularly if you have had previous abdominal surgery or underlying medical conditions.

The surgeon will need to assess your suitability for general anaesthesia and your medical and surgical history.

The surgeon will need to consider the nature of the hernia, whether it affects one or both sides of the groin and whether it is your first hernia or a re-occurrence.

The National Institute for Clinical Excellence (NICE) has reviewed this procedure and recommends that laparoscopic surgery can be used mainly for the repair of bilateral hernia (both sides) and recurrent hernias, but recently can be used for new hernias when an early return to activities is important.

You can obtain more detailed information about this procedure from their website: [www.nice.org.uk](http://www.nice.org.uk) or by contacting the NHS Response Line (Tel: 0870 1555 455).

Not all surgeons undertake laparoscopic surgery and only surgeons specially trained in these techniques will undertake Laparoscopic Hernia Repair.

## **What are the advantages and disadvantages of laparoscopic surgery over “open” surgery?**

One of the benefits of laparoscopic hernia surgery over “open” hernia surgery is that you can usually return to work and normal activities more quickly.

There may also be a lower risk of developing persistent numbness and pain after surgery and a smaller incidence of wound infection.

The disadvantage of laparoscopic surgery is that there is a slightly higher risk of injury to surrounding structures or tissues than there is in traditional “open” surgery.

There may also be a very slightly higher chance that the hernia may re-occur if performed by the laparoscopic method.

The surgeon will discuss all the risks and benefits of both open and laparoscopic surgery.

This will enable you to choose between the procedures and help you to decide which is the best treatment option for you.

## **What are the benefits of surgery?**

The main benefits are the relief of pain and discomfort caused by the hernia and the avoidance of future strangulation. Strangulation occurs when part of the intestine (bowel) bulges out of the hernia defect and becomes stuck.

This causes the hernia to suddenly become very painful and hard and will require an emergency (open) operation to repair it.

## What are the risks of Laparoscopic Hernia Repair?

All surgery has some risks and complications do occasionally occur: Most complications are mild and easily resolved. Specific risks of Laparoscopic Hernia Repair are:

- In approximately 5% of cases the keyhole method does not work and the surgeon may have to convert to a traditional “open” hernia repair.
- There is a very small risk that the instruments used in keyhole surgery may cause damage to large blood vessels, the bladder or the intestines. This may require further surgery to repair the damage.
- Rarely, damage may occur to the testicular vessels, leading to swelling, pain or shrinkage of the affected testis.
- There is a chance (less than 5%) that the hernia may come back, requiring further surgery.
- Occasionally, damage to the nerves or tissue during hernia repair may cause long term pain or numbness. This may require further investigation or treatment.
- There may be swelling and bruising of the testicles, scrotum and penis.
- Occasionally, some blood or fluid can build up in the groin after surgery and make the area swell and feel tender. Whilst this swelling will often settle, sometimes you may need another small operation to stop it.
- Difficulty in passing urine shortly after surgery may occur, requiring the temporary insertion of a catheter to empty the bladder.
- A hernia may develop around one of the wound sites. This may require corrective surgery.
- Testicular pain is frequent but usually only lasts for a short period after surgery.

## Other general risks of surgery

- A wound infection may develop which may need treatment with antibiotics.
- A post-operative bleed may occur, requiring further corrective treatment.
- Further rare complications of surgery include deep vein thrombosis (blood clot in the leg) or pulmonary embolism (blood clot in the lung). This can be life threatening.
- There is an increased risk of post-operative complications if you are overweight or if you smoke.

## Are there any alternatives to surgery?

There is no acceptable non-surgical medical treatment for a hernia.

A hernia does not get better over time, nor will it go away by itself.

The use of a truss (a hernia belt) can keep the hernia from bulging, but is usually only recommended for patients who are not fit enough for surgery.

The only permanent remedy for the condition is to repair the hernia surgically.

## What would happen if my hernia was left untreated?

The long-term course is for a hernia to become steadily worse. There is also the risk of the hernia becoming strangulated. This will require emergency surgery.

## How long will I be in hospital?

Laparoscopic hernia repairs can usually be performed as a day case.

If your recovery is slower than anticipated, you may require an overnight stay.

## What happens before the operation?

Prior to admission you will need to have a pre-operative assessment. This is an assessment of your health to make sure you are fully prepared for your admission, treatment and discharge.

This may be performed using a health questionnaire, over the telephone, or at a pre-assessment clinic. The pre-operative assessment nurses are there to help you with any worries or concerns that you have, and can give you advice on any preparation needed for your surgery.

Before the date of your admission, please read very closely the instructions given to you.

You **must** stop eating food and milk products at least **six hours** before your operation and stop drinking fluids **four hours** before. If your stomach is not empty there is a risk that you could vomit during the anaesthetic and inhale (breathe in to your lungs) the contents of your stomach. Small quantities of **water** can be drunk until **two hours** before your surgery.

You should bath or shower before coming to hospital.

On admission a member of staff will welcome you. The nurses will look after you and answer any questions you may have.

You will be asked to change into a theatre gown.

The surgeon and anaesthetist will visit you and answer any questions that you have.

You will be asked to sign a consent form.

A nurse will go with you to the anaesthetic room and stay with you until you are asleep.

A cuff will be placed around your arm, some sticky pads placed on your chest, and a clip attached to your finger. These will allow the anaesthetist to check your heart rate, blood pressure and oxygen levels during the operation.

A small plastic tube will be put in the back of your hand using a needle. This will be used to give you the medication to send you off to sleep.

## **What happens after the operation?**

Your blood pressure, heart rate and wound will be monitored. You will normally be able to start drinking shortly after the procedure and eat as soon as you feel hungry.

You will normally be able to get out of bed an hour or so after surgery. The nurses will assist you the first time just in case you feel faint or dizzy.

Some pain is to be expected around the wound sites. The nurses will monitor your pain and give you painkillers if necessary. A small amount of bleeding from the incision may also occur. The nurses will monitor the wound site and apply further dressings if necessary.

If your operation is planned as a day case you can usually go home when you are comfortable and the effect of the anaesthetic has worn off.

A general anaesthetic can temporarily affect your co-ordination and reasoning skills, so you will need a responsible adult to take you home and stay with you for the first 24 hours. During this time it is also important that you do not operate machinery, drive or make important decisions.

Before your discharge the nurse will advise you about your post-operative care and will give you a supply of painkillers. Your GP will be notified of your treatment.

After discharge you are advised to see your GP for any follow up requirements. If the surgeon wishes to see you again you will be notified of this prior to discharge and an appointment card will be posted to you.

## **What activities will I be able to do after my surgery?**

You can return to normal physical and sexual activities when you feel comfortable.

You can undertake gentle activities immediately after the operation if it feels comfortable to do so.

You should avoid heavy and strenuous activities whilst you experience pain doing so.

## **How much pain can I expect?**

It is normal to experience some pain and soreness around the incision sites, particularly over the first few days. It is, therefore, important for you to take painkillers regularly over the first two to three days (but remember that you should not exceed the stated maximum daily dose).

If the level of pain is still not acceptable to you, your local pharmacist should be able to offer you advice. If your pain should become increasingly worse you should consult your GP.

You may notice some discomfort for several weeks after the operation.

On rare occasions, a more chronic discomfort may persist. Whilst the full reasons for this are not known, it may, among other things, be a result of nerve damage. This may require further investigation or treatment.

## **How do I care for my wound?**

The dressings are waterproof so a light spray from a shower/wash will not do any harm.

You can remove any dressings the 5 days after your surgery.

If you notice that the wounds become increasingly swollen, painful, or if a discharge develops, arrange to see your Practice nurse or GP.

It is quite common after hernia repair for men to notice marked swelling and bruising of the scrotum and penis. This will subside over a couple of weeks. If this occurs, it is advisable to wear supportive underwear.

As the wounds heal, you may notice a numb area below the wounds. This may be due to disturbance to the nerves during surgery. Whilst in most cases sensation will gradually return, the numbness may be permanent.

## Can I eat and drink normally after the operation?

Yes, you can return to your normal diet as soon as you are ready. You may feel bloated or constipated for a few days. You may experience occasional feelings of nausea (sickness) and loss of appetite over the first week or so.

Eating a high fibre diet and increasing your fluid intake will help to maintain a regular bowel movement. You should normally open your bowels within 2-3 days of your operation although this may be uncomfortable at first.

If you do feel you are becoming constipated mild laxatives should help. If you do not have laxatives at home your local pharmacist should be able to give you advice.

## When will I be able to drive?

You should avoid driving for at least seven to ten days. Before driving you should ensure that you are able to perform an 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. Some insurance companies vary in the guidelines so please check with them to make sure you are covered to drive.

## When can I return 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 that you do.

Depending on how you are feeling and the type of job that you do, you will generally need about two weeks off work.

If you have a job that involves heavy lifting or strenuous activity you may need at least four to six weeks off work.

## When should I seek help?

- If you develop a fever above 101° F (38.5° C) or chills.
- Persistent vomiting or nausea.
- Increasing abdominal pain or distension.
- Increasing pain, redness, swelling or discharge of any of the wound sites.
- Severe bleeding.
- Difficulties in passing urine.

## Where should I seek advice or help?

### **Before the operation:**

Day surgery Pre assessment: 01225 826434

### **First 24 hours after surgery:**

Telephone the ward where you were treated via the Hospital switchboard:  
R.U.H: 01225 428331

### **Advice about your wound:**

Practice nurse at GP surgery  
NHS Walk-In Centre

### **Advice about pain killers:**

Visit your local Pharmacist.

### **General health inquiries:**

Ring NHS Direct on 0845 4647 (24 hours).  
Web address: [www.nhsdirect.nhs.uk](http://www.nhsdirect.nhs.uk)

### **Problems related to surgery:**

Make an appointment with your GP.

### **Urgent or severe problems:**

Call your GP or go to the A & E Dept at the RUH (or your local A & E)