

Mr. Zaed Z Hamady PhD, FRCS
Consultant Liver, Pancreatic and General Laparoscopic Surgeon
Southampton, UK

Laparoscopic Surgery for Inguinal Hernia Repair

Patient Information Sheet

What is an Inguinal Hernia?

A hernia is a weakness in the muscles of the abdominal wall (tummy). This weakness may allow a section 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. 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 happens during hernia repair surgery?

A piece of synthetic nylon mesh is placed over the muscular defect. This is called a 'mesh repair'.

There are two ways of having this operation:

Traditional open repair: An incision (cut) is made (approximately 3-4 inches) over the groin skin and the muscles are exposed. The mesh is then sewn into the muscles.

Keyhole surgery (Laparoscopic): In this method three small holes are made in the abdominal wall. A camera is inserted into the abdominal cavity or wall. To provide space for the surgery to be performed, your tummy is filled with carbon dioxide (a harmless gas). The surgeon then uses miniature instruments to return the protruding tissue back into the abdominal cavity and the mesh is placed from within. The mesh will remain in place permanently. Once the operation is completed, the carbon dioxide gas is allowed to escape before the cuts are stitched together.

The operation is usually done under general anaesthetic although the open repair can also be done under spinal anaesthetic or local anaesthetic only to the area. The decision of which kind of anaesthetic to use is made by the anaesthetist and will be discussed with you before the surgery. The surgery usually takes just under an hour.

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 as one of the treatment options for the repair of inguinal hernia. You can obtain more detailed information about this procedure from their website www.nice.org.uk. Not all surgeons undertake laparoscopic surgery and only surgeons specially trained in these techniques will undertake Laparoscopic Hernia Repair.

What are the benefits of surgery?

The main benefits are the relief of pain and discomfort caused by the hernia and avoidance of future obstruction (blockage) or strangulation. Strangulation occurs when part of the intestine (bowel) bulges out of the hernia defect and becomes stuck and loses its blood supply. This

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

What are the benefits of keyhole surgery?

There are three small incisions in keyhole surgery as opposed to one longer incision with traditional surgery. This means:

- The need for pain-relieving drugs is reduced
- The return to normal activities, including driving, sport and work is more rapid
- If a hernia repair is required on both sides, these can be performed at the same time through the same three small incisions.

Recurrent hernias are also best dealt with by keyhole methods.

What are the risks?

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 1 in 100 cases the keyhole method does not work and the surgeon may have to convert to a traditional "open" hernia repair.
- There is a small risk that the instruments used in keyhole surgery may cause damage to large blood vessels, the bladder or the intestines (Very rare). 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 (< 5 in 100) 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 extensive 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.

Other general risks of surgery are:

- 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?

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.

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.

You will be given specific instructions about when to stop eating and drinking, please follow these carefully as otherwise this may pose an anaesthetic risk and we may have to cancel 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.

How long will I be in hospital?

As this is a day case procedure you will be expected to go home on the day of your surgery.

After the operation

After the keyhole operation you will wake up very quickly and you may drink almost immediately. Dissolvable stitches are used on the skin and there are no restrictions on eating.

When you return home

It is normal to feel some discomfort in the shoulders for up to 48 hours after surgery (due to the carbon dioxide gas used to inflate your abdomen during the procedure) and you can expect some groin ache. There may be some bruising around the incisions or over the scrotum/lower abdominal wall.

Refrain from sport/heavy lifting for 2-4 weeks but walking is encouraged.

You may return to normal domestic activities as soon as you feel able and you may drive when you feel comfortable wearing a seatbelt and are able to perform an emergency stop safely.

You can remove any dressings the day after your surgery. You may then shower and bathe as required. 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.

If you need urgent advice after discharge please contact Spire Hospital, Ward 3 and the staff will direct you 0238091 4434