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Laparoscopic Surgery for Inguinal Hernia Repair

Information Sheet

What is an Inguinal Hernia?

A hernia is a weakness in the lining of the abdomen (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. This is called an inguinal hernia. The bulge may appear during vigorous activity, or when coughing or straining, and usually disappears when lying down.

What is Laparoscopic Inguinal Hernia Repair?

The word "Laparoscopic" is the medical term for keyhole surgery. Three little cuts are made in your tummy and small tube-shaped instruments are passed into these wounds. 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 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 stitching the cuts 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 two to four inches long in the lower tummy. Both types of hernia repair can be performed as day case surgery.

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 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.

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 quicker. 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.

What are the benefits of surgery?

The main benefits are the relief of pain and discomfort caused by the hernia and 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 operation.

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:

- Very rarely, the keyhole method is not successful and an open operation is necessary.
- There is an extremely 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 blood vessels, leading to swelling, pain or shrinkage of the affected testis.
- There is a chance (up to 2%) 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 almost always 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 short lasting post operatively.

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).

- 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.

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.

How long will I be in hospital?

Laparoscopic hernia repair can usually be performed as a day case or with one post-operative night's stay.

What happens before the operation?

Prior to admission you may 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.

A nurse will go with you to the anaesthetic room and stay with you until you are asleep. 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 incisions may also occur. The nurses will monitor the wound sites and apply further dressings if necessary.

Some people experience pain in the shoulder or the upper part of the back after laparoscopic surgery. This is because of the gas used to inflate the cavity and usually settles within a day or two.

If your operation is planned as a day case you can usually go home when you are comfortable and the effects 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.

A follow-up appointment (usually for about six weeks) will be arranged for you, or you can arrange one yourself with my secretary at Bridge Clinic if you prefer.

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

You can return to normal physical and sexual activities when you feel comfortable and at an individual pace. 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 the hospital or Bridge Clinic. 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?

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, contact the hospital or Bridge Clinic or alternatively 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.

Can I eat and drink normally after the operation?

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?

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.

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?

The hospital, your GP or Bridge Clinic .