MISS JOANNA B REED

RAMSEY OAKS HOSPITAL - PATIENT INFORMATION LEAFLET

Laparoscopic Groin Hernia Repair

INTRODUCTION

Hernia operations used to be performed by the conventional 'open' method using a long cut in the groin. However most hernia repairs are now performed laparoscopically with keyhole surgery.

LAPAROSCOPIC GROIN HERNIA REPAIR is a technique to fix tears and hernias in the abdominal wall muscle using small incisions, a telescope and a mesh patch. It offers a quicker return to work and normal activities, with less pain, for some patients. If your surgeon has recommended a laparoscopic repair of your hernia, this brochure can help you understand what a hernia is and will give you more information about the operation.

WHAT IS A HERNIA?

When a hernia occurs, it means the layers of the abdominal muscle have weakened, resulting in a bulge or tear. In the same way that an inner tube pushes through a damaged tyre, the inner lining of the abdomen pushes through the weakened area of the abdominal wall to form a balloon-like-sac. This can allow a loop of intestine or abdominal tissue to push into the sac. The hernia can cause severe pain and other potentially serious problems that could require emergency surgery.

The common areas where hernias occur are in the groin (inguinal), belly button (umbilical) and the site of a previous operation (incisional). An inguinal hernia is the most common type of hernia and twenty times more common in men than in women. It is likely that about 1 in 20 men will develop an inguinal hernia. A hernia does not get better over time, nor will it go away by itself.

HOW DO I KNOW IF I HAVE A HERNIA?

It is usually easy to recognise a hernia. The first signs of a hernia are pain or discomfort and/or a lump in the groin. 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 towards the end of the day.

Severe, continuous pain, redness and tenderness are signs that the hernia may be trapped or strangulated. These symptoms are cause for concern and your doctor should be contacted immediately.

WHY DO PEOPLE GET HERNIAS?

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, ageing, injury, an old incision or a weakness present from birth. Anyone can get 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 ARE THE TREATMENT OPTIONS?

There are few options available for a patient who has a hernia. Use of a truss (support) used to be prescribed. A truss applies support to the weak area, but it is not a cure and can be uncomfortable. It is often ineffective and is usually reserved for people who are not fit for an operation. Most hernias require a surgical procedure.

Surgical operations are now done in one of two ways:

The modern approach is a laparoscopic hernia repair. Laparoscopy or keyhole surgery is performed under general anaesthetic. Three 1cm incisions are made in the abdomen and carbon dioxide gas is blown into the abdomen to

lift the abdominal wall away from the internal organs so that the surgeon has a good view. A laparoscope (a long thin telescope) connected to a special camera is inserted through a cannula (a small hollow tube) into your abdomen, allowing the surgeon to view the hernia and surrounding tissue on a video screen.

Other instruments are inserted which allow your surgeon to work “inside” your tummy. The hernia is repaired from behind the abdominal wall. A soft and flexible piece of plastic mesh is placed inside the muscle wall to prevent the hernia from getting out through the hole in the muscle wall. This is often then tacked or stitched into place. The instruments are removed and the gas is allowed to escape before stitching the cuts together.

Since there is no cutting or stitching of the muscle with laparoscopic repair, this technique allows the patient to experience less post-operative discomfort and enjoy a shorter recovery time.

In a few patients who are not suitable for laparoscopic surgery the open or traditional approach is used. A cut is made in the groin area of the hernia. The cut will extend through the skin and fat, and allow the surgeon to get to the level of the defect. The surgeon may place a small piece of surgical mesh to repair the defect or hole. If this approach is necessary the surgeon will discuss this with you in more detail.

IS EVERYONE A CANDIDATE FOR LAPAROSCOPIC HERNIA REPAIR?

Only after a thorough examination can your surgeon determine whether laparoscopic hernia repair is right for you. It is particularly recommended for people who have had their hernias repaired before (a recurrent hernia) or for people who have hernias on both sides (bilateral hernias). The procedure may not be best for some patients who have had previous abdominal surgery or underlying medical conditions or who are very overweight.

BENEFITS OF HAVING THE SURGERY

The pain and lump will be relieved by the surgery. Planned surgical treatment of a hernia is much safer than leaving the hernia until an emergency happens.

RISKS OF NOT HAVING THE SURGERY

The hernia will probably get bigger. Rarely the hernia may become trapped and strangulated. The bowel may become gangrenous (that part of the bowel dies). This can be very dangerous and will need emergency surgery, possibly requiring surgery to the bowel. Your surgeon will help you decide if the risks of laparoscopic hernia repair are less than the risks of leaving the condition untreated.

RISKS AND COMPLICATIONS

Although the operation is considered safe, there are a few risks associated with laparoscopic hernia repair as with any other surgical procedure. The main complications of any operation are bleeding and infection, which are uncommon with laparoscopic hernia repair.

General complications during any operation may include:

- Adverse reaction to general anaesthetic
- Secretions may collect in the lungs causing a chest infection
- Clotting may occur in the deep veins of the leg. Rarely, part of this clot may break off and go to the lungs. This can be life threatening
- Circulation problems to the heart or brain may occur, which could result in a stroke
- Death is possible during or after an operation due to severe complications

The risk of a serious complication is very small – less than 1 in 1,000 patients will have a serious complication.

Specific risks from this surgery include:

The Risk	*What happens?*	*What does this mean?*
Excessive bleeding	Damage to large blood vessels causing bleeding in one in five hundred people.	Emergency blood transfusion (one in one thousand people), and abdominal surgery.
Injury to the bowels	Injury to the gut in one in three hundred people, or other organ such as the bladder.	More surgery to repair the injured organs will be needed.
Need for open surgery	Keyhole surgery may not work and the surgeon may need to do open surgery (less than 1% of people). This is more common in patients who are overweight.	Open surgery requires a bigger cut in the groin and may be more painful.
Trouble passing urine after the operation	A temporary problem due to spasm of the bladder muscles and pain. More common in older men.	A catheter (plastic tube) is put into the bladder to drain the urine away. This is usually temporary.
Swelling of the testicle and scrotum	In male patients, the testicle and the contents of the scrotum may swell due to the surgery or bleeding during or after surgery. Also the penis may show bruising.	The swelling of the scrotum may be drained using a needle. The testicle may stop making sperm and it may shrink (1 in 200 patients for first repairs and 1 in 100 for recurrent repairs).
Swelling at the site of the hernia persists after surgery	This is usually caused by a seroma or collection of tissue fluid under the skin and is common when larger hernias have been repaired.	The fluid can be drawn off with a needle in clinic if necessary but will disappear in time if left alone.
Injury to sperm tube (Vas Deferens)	The tube carrying sperm from the testicle to the prostate may be injured which may reduce fertility in 1 in 200.	Results in a partial vasectomy.
Change to testicle	The testicle may sit a little higher in the scrotum after surgery.	A change in physical appearance – no action is necessary.
Ongoing pain or discomfort in groin	One of the small nerves in the groin can be cut or caught in a stitch or scar causing long term burning and aching in the groin in 1 in 50. This is much less common after laparoscopic surgery compared to open surgery.	This may require injections or long term medication to control the discomfort.
Bleeding into the wound	Possible bleeding into the wound after the surgery.	This can cause swelling, bruising or blood stained discharge. Very rarely further surgery is required to stop the bleeding.
Hernia comes back	The hernia may come back in approximately 1 in 50 patients. The rate of recurrence of the hernia is the same for open surgery or laparoscopic surgery.	Further surgery to repair the hernia.
Hernias at the wound sites	A weakness can happen in the wounds where instruments were passed into the abdomen, with the development of a hernia.	Hernias usually need to be repaired by further surgery.
Adhesions (bands of scar tissue)	Adhesions can form and cause bowel blockage and possible bowel damage. This can be a short or long-term complication. This is much rarer in keyhole surgery than open surgery.	This may require further surgery to cut the adhesions and free the bowel.
Increased risk in obese patients	An increased risk of wound infection, chest infection, heart and lung complications and thrombosis.	
Increased risk in smokers	Smoking slows wound healing and affects the heart, lungs and circulation. Hernias are twice as likely to come back in smokers.	Giving up smoking before the operation will reduce the risk of wound infection, chest infection, heart and lung complications and thrombosis

WHAT IF THE OPERATION CANNOT BE PERFORMED BY THE LAPAROSCOPIC METHOD

In a small number of patients the laparoscopic method is not feasible because it may be difficult to see or handle the organs effectively. Factors that may increase the possibility of converting to the “open” procedure may include obesity, a history of prior abdominal surgery causing dense scar tissue, or bleeding problems during the operation. The decision to perform the open procedure is a judgement decision made by your surgeon either before or during the actual operation. The decision to convert to an open procedure is strictly based on patient safety.

HOW LONG WILL I BE IN HOSPITAL

Most patients who are fit and well can be admitted on the day of their operation and go home later on the same day. Older patients or those with heart, chest or urinary problems may need to stay overnight.

HOW SHOULD I PREPARE FOR MY OPERATION

If you smoke you should try and stop as smoking interferes with wound healing and doubles the risk of the hernia coming back again. Your GP may be able to help you with this.

Before the day of the operation you will get instructions telling you when you should stop eating and drinking. Your stomach must be empty in order to make the general anaesthetic safe.

If you take tablets to thin the blood such as Aspirin, Warfarin or Clopidogrel, then these must be stopped one week before your surgery. If you have health problems that mean these tablets cannot be stopped, then you may need a conventional operation rather than a keyhole operation. It is very important that you discuss this with the doctor in the clinic.

You usually arrive at the hospital on the morning of the operation. The nurses will help you to change into a theatre gown and get you ready for theatre. An anaesthetist will explain the anaesthetic procedure. The surgeon who is going to perform the operation will also see you and ask you to sign the surgical consent form if you have not already done so in clinic. If you have any queries that have not been answered in the clinic, then you will have an opportunity to ask the surgeon and the anaesthetist questions before your operation.

You may be asked to shave the area around your belly button where the camera will be placed. You do not need to shave in the groin area where the hernia is. **It is very important that your bladder is empty for the operation and you will be asked to empty your bladder immediately before you go down to the operating theatre.**

Following the operation, you will be transferred to the recovery room where you will be monitored carefully until you are fully awake, before returning to the ward. After a few hours when you are comfortable, able to walk and pass urine, you will be discharged.

AFTER THE OPERATION…

PAIN CONTROL

With any keyhole operation you can expect some soreness in the wounds. This will mostly be during the first 24 – 48 hours. We will give you pain killers that you should take regularly for the first two to three days which the nurse will discuss with you before discharge. Occasionally patients may experience shoulder-tip pain from the gas but this should settle very quickly; gentle walking will help to ease this. The discomfort should wear off within 4 – 5 days. If you have prolonged soreness and are getting no relief from the prescribed pain medication you should notify your GP.

WOUND CARE

The wounds are covered with dressings that should stay on for 5 to 7 days. You will have dissolving stitches that do not need to be removed. If you have any concerns about your wounds at any time, please make an appointment to see the practice nurse at your GP’s surgery.

DRIVING

You should not drive for 5 to 7 days after your operation, and should only drive then providing that you do not feel any after-effects and can perform an “emergency stop” without any pain or discomfort. After this, you should be fit to drive as normal. ***Your car insurance may be invalid if you drive when you are not medically fit to do so.***

DIET

A high fibre, high protein, low fat diet should be taken following hernia surgery to combat the effects of constipation, to encourage healing and prevent putting on weight following surgery. You should also drink plenty of water.

BOWELS/BLADDER

The nurses will ensure that you have passed urine before you leave the hospital, although you may find that the force of your stream is not back to normal for 24 hours. Some patients find that they are prone to constipation following surgery. This can be due to the painkillers and/or immobility after an operation. If constipation is a problem then your local chemist or NHS Direct (0845 4647) will be able to offer advice and simple over the counter remedies should help.

MOBILITY

You are encouraged to be up and about the day after surgery. For the first few days after surgery you should take frequent short walks around the house to avoid the possibility of postoperative clots in the legs and chest. After a week you can take brisk walks outside the house. Normal aerobic exercise activity such as swimming and jogging or going to the gym can be resumed in 2 weeks. It is safe to play golf after three weeks but this may still be uncomfortable. Any heavy lifting should be avoided for the first month. Sexual intercourse can be resumed when comfortable.

SLEEP/REST

You may feel more tired than normal in the first few days after your operation. This is perfectly normal and you should rest whenever you feel tired.

BRUISING

Bruising may develop around the wounds which may look quite alarming. However, it is nothing to worry about and will fade in 2 – 3 weeks. There is not usually any bruising in the groin but some may appear around the base of the penis and underneath the scrotum. This is nothing to worry about and will fade in 2 – 3 weeks.

Rarely, if you have had a large hernia repaired you may develop a lump again at the site where the hernia used to be. This is a collection of fluid called a seroma. It usually absorbs back into the body in a couple of months but if it causes discomfort then the doctor will be able to draw off some of the fluid with a needle when you come back to the clinic.

PERSONAL HYGIENE

You can shower or bath after 48 hours. It is best to try and leave the dressings and steristrips on for at least 5 – 7 days. Once you have removed your dressings, clean them and pat the wounds dry with a clean towel and then leave them open to the air.

RETURNING TO WORK/SICK CERTIFICATES

You should be fit to return to work after 2 – 3 weeks but if heavy lifting is involved then you may require a longer time off work. If you require a sick certificate, one can be issued to you before you leave the hospital. If you require a further certificate, you will need to see your GP.

FOLLOW-UP AFTER THE OPERATION

You will receive an appointment for a follow-up clinic appointment in about 4 - 6 weeks after your operation for a brief checkup. If you have problems before this please see your General Practitioner for advice.

Miss J Reed
Consultant Laparoscopic Surgeon

July 2010