

Hernia Surgery

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© Mr Bruno Lorenzi MD PhD

Consultant General, Upper GI and Laparoscopic Surgeon

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HERNIA SURGERY

Mr Lorenzi performs all types of hernia surgery. He has vast experience in both open and laparoscopic 'keyhole' techniques. We believe that each patient and hernia is different and the type of repair should be chosen on an individual basis. Mr Lorenzi will give you open and honest advice about the most suitable type of repair for you and your hernia.

Please read the information about surgery for your specific type of hernia.

INGUINAL HERNIA

An inguinal hernia is located in the groin region and is the classic hernia that people tend to associate the term with. Inguinal hernias are more common in men but women do get them.

There are of two types of inguinal hernia, direct and indirect. For patients this distinction is irrelevant as the same operation fixes both types.

An inguinal hernia is essentially a weakness in the muscle wall of the abdomen. This weakness allows the peritoneum, which is the thin lining that covers the abdominal wall and organs, to bulge through as a sac and give the impression of a lump.

This peritoneal sac can contain omentum (intra-abdominal fat), bowel or other organs, so usually when you stand up the hernia appears as a bulge in the groin and when you lie down it usually goes away. Sometimes you have to push it back in or it does not go back at all.

Common symptoms include ache and pain in the groin area (often worse as the day progresses or if you stand up for long time or do physical activities), testicular pain or trapped wind. Sometimes patients have no significant discomfort.

There are a few techniques for repairing an inguinal hernia. Mr Lorenzi will talk you through these in clinic and explain to you the pros and cons in relation to your problem. He will advise you on the most appropriate type of repair for you and your hernia.

To give you an idea, in young and active patients we favour a laparoscopic repair as we believe this combines the advantages of a keyhole operation with less pain and quicker recovery after surgery with a strong hernia repair in the long term.

A laparoscopic repair is also recommended if you have a bilateral (both groins) hernia as Mr Lorenzi will be able to repair both sides through the same small incisions in your tummy. It is also not uncommon to have a bilateral hernia even if you have symptoms only on one side. If you choose a laparoscopic repair and give Mr Lorenzi your consent, he will be able to repair both sides for you at the same time if needed.

A good reason for a laparoscopic repair is a recurrent hernia after a previous open operation. This way Mr Lorenzi will not have to go through the scarring of your previous surgery, and the repair will be quicker and more effective.

In case of a large incarcerated non reducible (you are not able to push the hernia back in) hernia or an inguinoscrotal hernia, we usually prefer an open 'tensionfree mesh' procedure as it is sometimes difficult to fix your hernia laparoscopically.

If you have a recurrent hernia after a previous laparoscopic repair, Mr Lorenzi will also offer you an open operation as it will not be possible or very difficult to perform a keyhole repair again.

In elderly patients or if you have significant medical problems that preclude you from safely having a general anaesthetic, Mr Lorenzi and Dr O'Hara will offer you an open repair under spinal or loco-regional anaesthesia. A laparoscopic repair is not possible without a general anaesthetic.

Mr Lorenzi has stopped performing a 'no mesh' repair because he believes that this technique is associated with a higher chance of having chronic discomfort after surgery (due to the tension of the repair) and your hernia is more likely to come back. However, we are very happy to refer you on to a surgeon who performs 'no mesh' repair if this is requested.

Technique of a laparoscopic (TAPP – Trans-Abdominal Pre-Peritoneal) inguinal hernia repair

Mr Lorenzi has successfully performed thousands of laparoscopic operations for inguinal hernias. In the last few years he has embraced 3D technology for keyhole surgery. He is a pioneer of this technique, which gives significant advantages over standard laparoscopy. The use of a 3D camera has improved the magnification and the definition of the tissues and anatomical planes during surgery leading to a safer, more precise and even faster procedure. In the expert hands of Mr Lorenzi, this technology facilitates the surgical performance leading to a virtually bloodless operation and a very low incidence of seromas or haematomas (fluid or blood at the site of surgery after the operation).

Mr Lorenzi will make a small incision of approximately 1 to 2 cm at your umbilicus (belly button) and gently inflate your tummy with harmless carbon dioxide gas to provide room for the surgery to be performed. He will use a long and narrow telescope camera to look inside your abdomen. He will make two more small cuts of 0.5 cm on either side of your abdomen for inserting different instruments to perform the operation.

The peritoneum (the sac that forms the hernia and can contain the bowel or other organs) is incised and the hernia defect identified. A pre-shaped anatomical synthetic mesh (usually a 3D Bard mesh) is placed between the muscle wall and the peritoneum to cover the hernia hole. The peritoneum is then closed back into place with a fully absorbable stitch. Mr Lorenzi never uses metallic corkscrew tacks, which have been demonstrated to be sometimes associated with problems. He will then inject local anaesthetic in the muscle layers on the side of your repair to ensure the initial post-operative pain is well covered. The operation takes about 45 minutes for unilateral (single side) hernia and 60 minutes for bilateral (both sides) hernia.

Technique of a "tension free" open mesh inguinal hernia repair

During a tension free open mesh repair, the inguinal hernia is repaired by making a small (2 inch) incision in the groin, followed by a split of the fascia of the external oblique muscle (but not the muscle itself) to identify the hernia sac. The sac is then usually tied off and a synthetic mesh is overlaid to strengthen the abdominal wall. The fascia of the external oblique muscle, the subcutaneous fat and the skin are subsequently closed. Local anaesthetic is injected before the end of the procedure. This technique takes approximately 45 minutes.

Mr Lorenzi favours a selffixing (ProGrip) mesh, which means he uses no or only few dissolvable stitches to hold it in place. There have been studies showing this potentially reduces both short and long term post-operative pain. It also makes the operation quicker and therefore your recovery faster.

UMBILICAL OR PARA-UMBILICAL HERNIA

An umbilical or para-umbilical hernia is a lump (usually small) in, above or below the belly button. Sometimes you can push the umbilical hernia back in but often not. It is usually a protrusion of fat (the bowel rarely is present in an umbilical hernia) and results from a weakness in the abdominal wall muscle sheath.

Repairing an umbilical hernia is generally straight forward and takes about 30 minutes.

Mr Lorenzi will make a small transverse incision above or below the umbilicus (belly button). The hernia sac is often quite small and can simply be pushed back in. If the defect is very small a mesh is not necessary and a couple of strong stitches will be sufficient. In the case of a larger hernia, a small piece of self-fixing mesh is inserted behind the muscles and the fascia sheath repaired over the mesh for a double layer repair. The wound is closed with a continuous running absorbable stitch under the skin. This dissolves over time and does not need to be taken out.

We offer very rarely and only in selected cases a laparoscopic repair for umbilical hernia. Mr Lorenzi will inform you directly if this is your case. Patients can leave hospital soon after surgery.

EPIGASTRIC HERNIA

An epigastric hernia is a small lump located higher on the abdominal wall above the umbilicus and usually in the area just below the breastbone (or sternum).

It is caused by a defect (usually very small) between the recti muscles (often referred to as the "six pack" if you are fit enough to have one). The hernia sac usually contains just a bit of fat. Occasionally patients have multiple small defects.

The operation to repair an epigastric hernia is very similar to umbilical hernia and takes about 20 to 30 minutes. A small incision is made and the defect is identified between the muscles. For small hernias the defect is repaired with sutures only, or with insertion of a small mesh if the hernia is larger. The skin is closed with an absorbable stitch, which does not need to be taken out.

A keyhole repair is not usually recommended for this type of hernia. Mr Lorenzi will inform you directly if you could benefit for a laparoscopic repair for your epigastric hernia.

Patients can leave hospital soon after surgery.

FEMORAL HERNIA

A femoral hernia is a lump in the groin below the skin crease and is much more common in women than men. Because of the anatomical position, a femoral hernia usually has a narrow neck and the peritoneal sac can be trapped together with a small piece of bowel requiring emergency surgery.

Like an inguinal hernia, a femoral hernia can be repaired with an open or a laparoscopic operation. Whenever possible, Mr Lorenzi favours a keyhole repair, which allows placing a mesh to cover the defect (it is difficult to put a mesh in a satisfactory position during an open femoral hernia repair because of the proximity of important vascular structures) reducing the chance of recurrence.

The technique is similar to the one described for inguinal hernia repair.

SPIGELIAN HERNIA

A Spigelian hernia is a protrusion through a weakness between the muscle fibres of the abdominal wall. It usually happens on the lateral side of your tummy. The bulge may contain fat or intestine, but it is usually small and sometimes difficult to detect.

The repair can be performed using an open or keyhole technique and Mr Lorenzi will advise you which is the best type of repair for you.

INCISIONAL HERNIA

An incisional hernia occurs in the scar following a previous operation.

Incisional hernias occur for several reasons including wound infection, failure of the suture repair or the repair has just gradually weakened over time. An incisional hernia can be quite large and uncomfortable.

A particular type of incisional hernia is the one after C-section or Pfannenstiel incision for gynaecological procedures. This is a common hernia in young women and often does not involve all muscle layers of the abdominal wall (they are called interstitial hernias) but can affect significantly the strength of the tummy as well as have a detrimental effect on the appearance of the abdomen and the quality of life in young patients. Mr Lorenzi has a specific interest in this type of incisional hernia and will be happy to give you his expert advice on your specific problem.

The repair of an incisional hernia can be performed via a keyhole laparoscopic operation or an open mesh repair. It will depend upon the position, size and reducibility (how easily it goes back in) as to which operation is possible. Overall Mr Lorenzi prefers open techniques to repair an incisional hernia as they are usually stronger and better restore the natural shape of your tummy.

Excellent results are possible, even in large and difficult hernias, but the recovery could be long (months) and involves a lot of cooperation and patience. For this kind of hernia Mr Lorenzi will always spend time with you in clinic before deciding what operation is best for you and will explain the technique to you as well as the potential risks and complications in detail.

RISKS OF HERNIA SURGERY

Surgery is recommended for a symptomatic hernia and for a hernia at risk of complications such as incarceration (when the hernia cannot be pushed back in) or strangulation (when the content of the hernia, usually the intestine, is twisted or constricted and does not receive adequate blood supply), which warrant urgent surgery.

After surgery you should no longer have the hernia. Surgery should prevent the serious complications that a hernia can cause and allow you to return to normal activities after a recovery period.

Surgery is the only definitive way to cure the condition. You can sometimes control the hernia with an external support like a truss (support belt) for an inguinal hernia or simply leave it alone. It will not get better without surgery, and could increase in size with time. It can also be dangerous if you develop complications (such as a strangulated hernia), which need an emergency operation. However, it is your decision to go ahead with the operation or not.

Mr Lorenzi will discuss your specific risks with you during your consultation. Different patients and different operations will have different risks.

We will do our best to make your operation as safe as possible but complications can happen. Some of these are extremely rare but can be serious and can even cause death. You need to know about these potential complications to make an informed decision about surgery. Knowing about whether you are at particular risk of any of these complications will also help us to identify and treat any problem early.

Some of the complications are common to any operation and others are specific to hernia surgery. To summarise:

- There is a small risk of bleeding and in rare cases a blood transfusion may be required.
- There is a risk of infection of the wounds, the surgical site in the abdomen/groin, a chest infection or a urinary infection.
- There will be some pain and discomfort associated with the surgery. It is also possible to have some pain in your shoulders over the first few hours if your operation is done using keyhole surgery due to the irritation of your diaphragm by the gas used during the operation. Mr Lorenzi and Dr O'Hara use specific anaesthetic and surgical techniques to reduce the pain and sickness and improve your comfort after surgery (deep neuromuscular blockade, low intra-abdominal pressures and injection of local and regional anaesthetics). It is common to have some pain in your abdomen or groin over the first few days after surgery.
- There will be some scars on the abdomen where the incisions are made for keyhole surgery and/or a larger scar in the abdomen or groin if the surgery is converted to, or performed with, an open technique. The scar fades with time.
- There is a possibility of fluid or blood collecting around the operation site in the days and weeks afterwards. These are known as 'seromas' or 'haematomas'. This is where fluid collects in the wound. After your hernia has gone there is a potential 'dead space', this can result in a fluid or blood collection. The chances increase with increasing size of hernia. This is very likely when you have a large hernia, especially one going down and filling the scrotum and with large incisional hernias. This will usually resolve on its own in time. A seroma may spontaneously release through the skin wound (this happens with umbilical hernia repair occasionally) and sometimes it may be necessary to drain the seroma (often done via ultrasound in outpatients). Large ones may take several months to resolve but will go away eventually. Rarely the fluid or clot needs to be removed with an operation.
- Temporary bruising or swelling is very common after hernia surgery and will vary from patient to patient. It is more common after open surgery and in patients who take anticoagulation (blood thinning) drugs. It usually settles over the course of 2-3 weeks.
- There is possibility of an area of numbness near the scar(s), which could last over a year or in some cases may also be permanent. This risk is higher for large incisional hernias. Most patients would not notice the numb area long term.
- Sometimes the area over the operation becomes very sensitive to the touch. You could experience a distinct 'tingling' sensation. Clothes touching the area might evoke this sensation. Sometimes it can be quite unpleasant and painful. It is most likely due to the raw nerve endings growing back into the area. It is nothing to worry about and usually improves. If you start to massage the area after a few weeks it will usually resolve completely.
- There is a small but real risk of chronic pain or discomfort in the groin or abdomen following the repair. It is more frequent after inguinal hernia repair. Chronic pain after umbilical, epigastric or abdominal repair appears to be rare.

The most common cause appears to be inflammation around the attachment of the inguinal ligament to the pubic bone. The area becomes very tender to touch and the condition is called osteitis pubica.

It seems to be linked with scarring around the inguinal ligament and the pubic bone causing tension and traction (it is a similar process to 'Tennis or Golfer's Elbow'). The discomfort often presents a few months after surgery. Patients are usually aware of an initial slight discomfort, sometimes in certain positions like driving or sitting. Walking around or standing up often relieves some of the discomfort. The discomfort is often similar to the ache patients had from their hernia before surgery however there is no associated lump and the hernia has not come back.

The problem is frequently fixable through a combination of injection(s) of steroid and/or local anaesthetic and massage.

This problem exists with 'no mesh' surgery as well and may actually be more frequent because of the increased 'tension' in the repair stitching the inguinal ligament up to the muscle. Having a 'nomesh' repair will not remove the chances of having chronic pain.

Another cause of chronic discomfort can be from damaged nerves. The nerve may be caught up in scar tissue or a stitch (this is potentially one of the advantages of using a self-fixing mesh), or the nerve may have been cut and the raw end forms a neuroma (a swelling on the end of the nerve). Experience, careful surgery and attention to identifying nerves during the procedure will help reduce this problem. It is less common but more difficult to treat than osteitis pubica. It may respond to injections and massage. Rarely a reoperation and actually removing the stiches and/or the mesh could be necessary.

Whatever technique you have to fix your hernia; open or keyhole, mesh or no mesh, there is always a potential to develop longterm pain after the surgery. We will do our best to try and reduce the chances of chronic pain favouring special techniques such as the use of a mesh that requires no or minimal stitches and performing a tension free repair. However, despite all these efforts a very small number of patients (1-2% of cases) could develop chronic pain or discomfort.

If you develop chronic pain, Mr Lorenzi will be happy to see and help you in clinic. You will often be referred to a Specialist Chronic Pain Consultant for advice and injection(s) if needed.

- There is a risk of injury of internal organs (intestine, bladder, etc) or blood vessels during the operation. This risk is increased if the organs are stuck to the area where the hernia is located.
- In men undergoing inguinal hernia repair, there is a risk of damage of the testicle or its blood vessels. This could cause shrinkage or decrease function of the testicle on the same side of the operation. Rarely your testicle may have to be removed at the time of surgery.
- There is a risk of developing hernias at the site where the ports are put in to do the keyhole surgery
- There is a risk that the hernia may come back after the operation (recurrence), and potentially require a further operation in future. There is always a chance that your hernia may recur. The chances of any given hernia recurring depend on a number of factors; how big the hernia was to start with, whether you have a physical job, etc.
- There is a risk of needing another open or laparoscopic operation (re-operation) in the event of technical difficulties or complications
- You may have difficulty passing urine after the operation. You may need a urinary catheter (tube into your bladder) for few days. This risk is higher after inguinal hernia repair especially if bilateral and if you have spinal anaesthesia.
- There is a risk of blood clots developing in the legs (Deep Vein Thrombosis, DVT) which may travel to the lungs (Pulmonary Embolus, PE)
- There is a risk of allergic reaction to the equipment, material or medications.