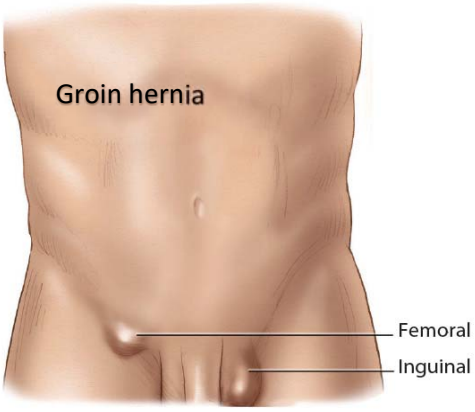
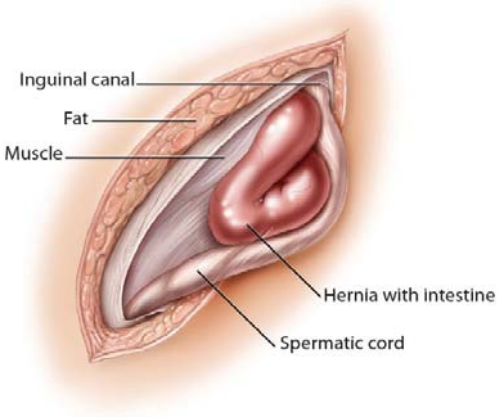
Groin Hernia Repair

Information on Inguinal & Femoral hernias





What is an inguinal hernia?

A **hernia** is a place where part of an organ or intestine bulges through a weak area of the muscle that should hold it in place.

A hernia can happen in different parts of the body. One of the commonest areas for this to occur is in the **groin**, the place where the upper leg meets the abdomen. Most groin hernias due to and **inguinal hernia**. With an inguinal hernia, intestines or fatty tissue push through a weak spot. This can look like a bulge in the groin area. In males, it can cause swelling of the scrotum.

Less commonly, a groin hernia is caused by a **femoral hernia.** These appear as a Those in the groin, upper thigh or labia. Femoral hernias are 10 times more common in women and although often smaller then hernias are much more prone to strangulation and should therefore almost always be repaired.

What are the symptoms of a groin hernia?

The most common symptoms are

- Bulge in the groin, scrotum or abdominal area that often increases in size when coughing or straining
- Mild pain or pressure at the hernia site
- Numbness or irritation due to pressure on the nerves around earlier

Sharp abdominal pain and vomiting can mean that the intestinal has slipped through the hernia sac and is strangulated. **This is a surgical emergency and immediate treatment may be required.**

Do all hernias need to be repaired?

Not all hernias need to be repaired. If your hernia does need repair, surgery is the only way to do it. Your doctor may recommend surgical repair:

- If the hernia is painful.
- If the hernia is **strangulated**. This means the tissue has become trapped or twisted and may not be getting enough blood. A strangulated hernia is dangerous.
- To prevent the hernia from becoming painful or strangulated.

Who is likely to get a hernia?

There may be no reason for getting a hernia. However there are some low risk factors including the following:

- Older age. Muscles become weaker as one gets older
- Obesity. Increased weight puts extra pressure on abdominal wall muscles
- Chronic straining or sudden twists, pulls are strains may be associated with the development of a hernia
- Family history
- Connective tissue disorders
- Pregnancy. One in 2000 women develop area during pregnancy

Conditions that may be confused with a hernia?

There are a number of conditions that may give rise to swelling in the groin. These include

– Enlarged lymph nodes

– Cysts

– Enlarged arteries (aneurysms) or veins (varicocele)

– Growths (a fatty growth called a lipoma)

– Scrotal swellings e.g. testicular problems or fluid in the scrotum i.e. hydrocele

Nonsurgical treatment

Watchful waiting is an option for patients with an inguinal hernia that is not causing symptoms. The risk of hernia incarceration highest in the first year after diagnosis and may be as high as 5%. Thereafter, the yearly risk of incarcerations is less.

It is therefore reasonable to consider a watch and wait approach if an individual is having no symptoms and is not concerned about the risk of incarceration.

The risk of incarceration is much higher in femoral hernias and almost half of these will develop an acute problem within two years of diagnosis. They should therefore almost always be treated with surgery.

Trusses and supports have been used but have now fallen out of favour. It is not uncommon for a patient to come in for review with the trusts in place and the hernia is actually out on the trusses putting pressure on the groin which actually prevents the hernia from going back in. Long-term use of trusses may also lead to thinning and weakness of the muscles of the groin.

scottish hernia centre
WWW.SCOTTISHHERNIA.COM

Richard Molloy Consultant Surgeon

Ross Hall Hospital 221 Crookston Road, Glasgow G52 3NQ
Appointments: 0141 810 3151

Groin Hernia Repair

Surgical treatment

Open vs. Laparoscopic Inguinal Hernia Repair

There are pros and cons to an open and laparoscopic approach when considering repair of a groin hernia. Although one might intuitively imagine that recovery is a lot faster with a laparoscopic or keyhole approach, this is not actually the case and it's a difficult to tell any difference between patients who have undergone either operation one week after their surgeries.

Some studies have suggested that a laparoscopic approach gives rise to less long-term pain and nerve irritation. However, the downside of a laparoscopic approach is that there is a slightly greater risk of serious complications such as injury to bowel. The risk of having a hernia comeback is also somewhat higher at 2% versus 1% for open surgery. Laparoscopic surgery requires a deeper general anaesthetic whereas many open inguinal hernia operations can be performed under local anaesthetic.

The laparoscopic approach is particularly well suited to in patients who have a hernia on both sides (bilateral) or patients who have previously undergone an open hernia repair and the hernia has come back. In this circumstance, during laparoscopic surgery, the surgeon approaches the hernia from the deep side of the muscle and therefore stays away from the previous operation site (which can be very scarred).

Similarly, if a laparoscopic approach was previously used, an open approach would be best to fix a recurrent hernia.

Surgical repair of groin hernias

The type of surgery depends on the hernia size and its location. Repeat surgery for a recurrent hernia may also be treated by a differently to a first time hernia. Your age, health, anaesthetic risk and also the surgeons expertise are also important. An operation is the only treatment for an incarcerated – strangulated or femoral hernia.

Most groin hernia's can be repaired using an **open or laparoscopic approach.** It's a common surgery and usually very successful. Although previously we used to perform a sutured or stitched repair, we now know that the risk of developing a recurrent hernia with a stitched repair is quite high whereas the risk is low when a non-reactive mesh is used. Although there have been concerns about complications related to the use of mesh, we also know that chronic problems such as pain or nerve injury – irritation can occur with both a sutured or mesh repair.

Open Hernia Repair

In **open hernia surgery**, the surgeon makes a 2 –3 inch incision over the hernia site and the hernia which usually contains bowel is replaced back into the abdomen. A lightweight non-reactive maces then used to repair the opening in the muscle that is cause the hernia to care.

Although mesh plugs can be used, increasingly surgeons use partly absorbable mesh which may have a Velcro type attachment to one side which allows it to stick to the muscle and tissues. The main advantages is that the surgeon does not need to stitch the mesh into place, reducing the chances of catching any nearby nerves. The opening in the muscle and skin is closed with either stitches, staples or glue.

Laparoscopic Hernia Repair

When performing a **laparoscopic hernia repair**, the surgeon makes three small incisions in the abdomen, below the umbilicus (0.5 inch X 1 and 0.25 inch X 2).

Carbon dioxide gas is then used to separate the layers of the muscle of the abdominal wall and identify the weakness where the hernia is coming through. The surgeon uses long instruments and a tiny camera (**laparoscope**) to perform the operation looking at a television monitor. The hernia and its contents which may include bowel are replaced back into the abdominal cavity and the weakness is repaired using a mesh.

At the Scottish Hernia Centre, we perform this operation without entering the abdominal cavity (Totally Extra Peritoneal repair (TEP) repair). This operation is performed using a general anaesthetic. It is normally possible to perform the operation as a day case, particularly if it is performed early in the day.

Are there any restrictions after surgery?

It is helpful to eat a high fibre diet and drink 8-10 glasses of water/liquids/day after surgery to prevent constipation and the need to strain.

- It is important to slowly increase activity after surgery. Following discharge, you should not "take to the bed" and it is important to get up and walk every hour so to prevent any blood clot formation.
- Most patients will have returned to near normal activity after 2 to 3 weeks.
- We generally recommend avoid driving for the first week and to practice an emergency stop before going out in the car for the first time after an operation.
- It is helpful to have somebody with you who can take over the driving if you feel uncomfortable the first time you go out.
- You should not attempt to lift anything more than 10 kg for the first four weeks after surgery and this lifting limitation may be extended for 3—6 months if you have had repair of a recurrent or complex hernia.
- The majority of patients who are sexually active before surgery will be able to return to normal sexual activity after an average of 14 days.

When to contact your surgeon or GP?

You will be given a date to view the clinic after your surgery. You should contact the hospital or your GP after an operation if you have new pain it will not go away

- Pain gets worse
- A fever of more than 38.3°C a continuous vomiting
- Swelling redness bleeding or bad smelling discharge from the wound site
- Stronger continues a dull pain or swelling of the abdomen
- No bowel motion by 3 to 4 days after your operation

scottish hernia centre
WWW.SCOTTISHHERNIA.COM

Richard Molloy Consultant Surgeon

Ross Hall Hospital 221 Crookston Road, Glasgow G52 3NQ
Appointments: 0141 810 3151

Groin Hernia Repair

Complications of hernia surgery

Risks	Percent for Average Patient	Comments
Wound Infections:	**Open:** 0.3% **Laparoscopic:** 0.2%	Antibiotics and drainage of the wound may be needed. Smoking and increase the risk of infection
Complications: including surgical infections, breathing difficulties, blood clots, kidney complications, cardiac (heart) complications and return to theatre	**Open:** 1.5% **Laparoscopic:** 1.2%	Complications related to general anaesthetic surgery may be higher in smokers, the elderly and/ or obese patients and in those with high blood pressure and breathing problems. Wound healing may also be reduced in smokers and those with diabetes and immune system disorders.
Pneumonia: infection in the lungs	**Open:** 0.1% **Laparoscopic:** 0.1%	Movement, deep breathing, and stopping smoking and help prevent respiratory tract infections.
Urinary tract infections: infection of the bladder or kidneys	**Open:** 0.1% **Laparoscopic:** 0.1%	Drinking fluids and catheter care may reduce the risk of bladder infections
Death:	**Open:** < 1.0% **Laparoscopic:** < 1.0%	A very rare complication. Emergency surgery for a strangulated or incarcerated hernia is the most important factor

Reported outcomes from literature over last 10 years	Percent for Average Patient	Comments
Chronic (long-term) pain	**3 months** 2.9% **2 years** 4.5—20% **4 years** 30%	Factors contributing to chronic pain include emergency hernia repair, a large scrotal hernia or a recurrent hernia repair. Pain may be less with a laparoscopic procedure compared to an open procedure. The intensity and severity of pain tends to become less over time. It is difficult to interpret many of the studies because they do not differentiate between the severity of the pain and frequency the pain. It is clear that at least 10 to 20% patients may get some take up to one year after surgery, only one or 2% of patients get significant or disabling pain at one year after operation.
Recurrence: A hernia can come back after the repair	**All patients** 1-15% **Open** 4—5% **Laparoscopic** 10%	A recurrences develops around half as often when mesh is used vs. a non-mesh (sutured) repair. The risk of recurrence is about double for a laparoscopic repair versus an open repair. A laparoscopic approach is recommended for recurrent hernias because it is possible to avoid the scar tissue from the first operation. There is a higher rate of recurrence in old men who undergo a laparoscopic repair. Surgeon experiences very important when performing both open a laparoscopic repair and in the best hands, recurrence rates of 1 to 2% for open and laparoscopic repair respectively are seen.
Neuralgia: Nerve pain causing tingling or numbness	**Open** 10% **Laparoscopic** 7%	Pressure because of swelling in the area, staples, stitches or trapped nerve in the operation site may give rise to nerve pain. Unfortunately further surgery frequently does not help here. However the intensity and disability associated would neuralgia tends to diminish in time.
Seroma: A collection of clear/ yellow fluid	**Open** 8% **Laparoscopic** 3%	Seromas can occur at the operation site. They normally don't cause a problem and are usually naturally reabsorbed by the body after a few weeks. On rare occasions removal with a sterile needle may be necessary.
Haematoma: A collection of blood in the operation site	**Open** 2% **Laparoscopic** 3%	If the swelling is not too large a haematoma is usually treated with anti-inflammatory drugs bed rest and avoidance of activity. Occasionally it may be necessary to go back to theatre to evacuate a haematoma. Patients who are taking blood thinners such as the clopidogrel or warfarin are at increased risk these drugs are normally stopped before any hernia surgery.

Pain after Inguinal Hernia Surgery

Around 10% of patients report pain/ache one year after operation. This is not to say however that it is disabling or that this interferes with their normal daily activities.

Around 2% of patients will have moderate to severe pain that interferes to some degree with their normal day-to-day functioning. At least three quarters of such patients will also have complained if severe pain prior to their operation. Put another way, although we can fix the physical hernia, many patients who have severe pain before an operation may continue to complain of significant pain following the surgery. The surgery itself does not necessarily cause the pain. In fact, surgery appears to be associated with at least a 50% reduction in the intensity of pain at one year after surgery, compared to the severity of pain before surgery.

Pain may be more common when using heavy versus lightweight or partially absorbable meshes. The incidence of pain is slightly higher in women. There does not appear to be a significant difference in the incidence of chronic severe postoperative pain with a laparoscopic versus an open approach and also with a mesh versus a sutured repair.

Some patients may be prone to developing pain after surgery. In particular those were the lottery before the operation and patients who have other chronic pain syndromes such as chronic neck pain and chronic back pain may be predisposed to developing pain after hernia surgery.

scottish hernia centre
WWW.SCOTTISHHERNIA.COM

Richard Molloy Consultant Surgeon

Ross Hall Hospital 221 Crookston Road, Glasgow G52 3NQ
Appointments: 0141 810 3151