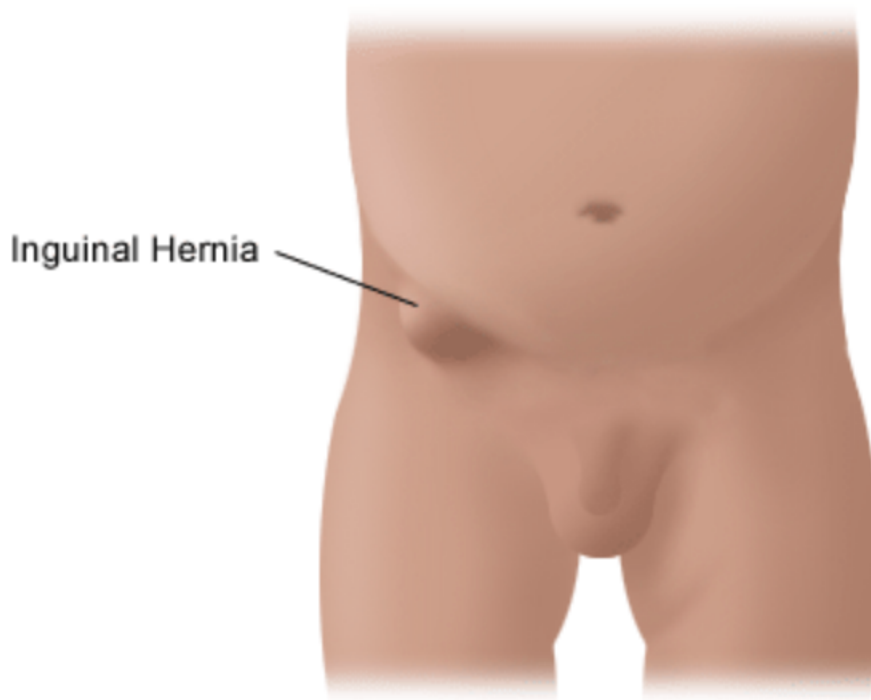


Inguinal Hernia



This is the classic type of hernia that people associate the term “hernia” with. It is located in the groin and can be one of two types – direct or indirect. The different types of inguinal hernia are irrelevant for patients as the operations to fix inguinal hernias fix both types

What is an inguinal hernia?

An inguinal hernia is a weakness or defect in the abdominal wall, in the groin region, that allows the intra-abdominal contents to bulge through from the inside creating a swelling.

The contents protrude through in a sac that is made out of the lining of the abdominal contents called the peritoneum.

The sac can contain many different structures from the abdominal cavity. Intra-abdominal fat and bowel are the most common contents, however, bladder, colon and the appendix are a few other organs that can be encountered.

What are the symptoms of an inguinal hernia?

Discomfort or pain in the groin region, that often gets worse throughout the day, is one of the most common symptoms. The pain may feel like a dull ache or trapped wind type pain to a sharp stabbing pain. The pain can descend into the scrotum and cause testicular pain.

As the inguinal hernia bulges through the abdominal wall there will be a swelling visible. This is often soft, non-tender and disappears on lying down. The inguinal hernia can become large enough that it moves from the groin region and descends into the scrotum.

Some inguinal hernias become large enough to interfere with the ability to carry out the normal daily living activities.

Are inguinal hernias dangerous?

Asymptomatic, soft and easily reducible inguinal hernias can be safely observed and left alone. However, the natural history of inguinal hernias is that they enlarge over time and eventually cause symptoms.

If the inguinal hernia becomes very tender or becomes irreducible then it is important that you should seek urgent medical attention.

How is an inguinal hernia diagnosed?

Clinical examination by an experienced clinician is often all that is required to diagnose an inguinal hernia.

If there are any doubts as to the cause of a swelling in the inguinal region then an ultrasound scan is the first imaging modality to confirm if an inguinal hernia is present or not.

Sometimes a CT scan or an MRI may be required to help complete the full clinical work-up, but this is very rare in the setting of uncomplicated inguinal hernias.

How is an inguinal hernia repaired?

The gold standard for repairing an inguinal hernia is the “Lichtenstein Tension Free Mesh Repair”.

This operation is carried out by making a 6-8cm incision in the groin skin crease. The hernia sac is identified, fully mobilised and either reduced back in to the abdomen or tied off and removed. The abdominal wall is then repaired using a plastic mesh.

This method is quick, very reliable, safe and has withstood the test of time.

Is this surgery carried out under local, spinal or general anaesthetic?

This operation is routinely carried out under local anaesthetic or general anaesthetic at the Manor Hospital. Sometimes patients may require or opt for a spinal anaesthetic to enable the operation to be carried out.

All inguinal hernias repaired under local anaesthetic are carried out as part of the Oxford Hernia Clinic (<https://www.oxfordherniaclinic.com/>).

The inguinal hernia must meet certain criteria to be carried out under local anaesthetic and these will be discussed on an individual basis.

If a patient is not amenable to have their hernia repaired under local anaesthetic then a general anaesthetic will be recommended.

A general anaesthetic is where the anaesthetist gives the patient medication, usually through a drip (cannula) into a vein and sends them “off to sleep”. The patient then remains unconscious, still and pain-free for the duration of the operation.

A breathing tube is inserted after the patient is asleep so the breathing can be controlled throughout the operation by the anaesthetist. When the operation is finished the anaesthetist allows the patient to wake up.

Local anaesthetic is still used even if the operation is carried out under a general anaesthetic to ensure optimal pain control when the patient wakes up.

Some patients may wish to avoid a general anaesthetic for a variety of reasons e.g. exacerbating memory problems or progressing early onset dementia. If the inguinal hernia is not amenable to repair under a local anaesthetic then a spinal anaesthetic is required.

A spinal anaesthetic involves injecting local anaesthetic into the fluid that surrounds the spinal cord, specifically the subarachnoid space. This anaesthetic numbs the nerves that supply the abdomen, hips, bottom and legs allowing the patient to be awake during the operation. The spinal anaesthetic usually takes 1-4 hours to wear off.

Are there operations that do not involve a plastic mesh be used?

There is an alternative to the Lichtenstein tension free mesh repair that requires no mesh. This is called the Bassini type repair or No mesh technique.

The Bassini type repair is very similar to the Lichtenstein tension free mesh repair however the abdominal wall is reconstructed and reinforced using sutures rather than a mesh.

The Bassini type repair has been carried out for well over a century however the long-term recurrence rate of the inguinal hernia is slightly higher using this technique when compared to the Lichtenstein tension free mesh repair.

Patients often ask if not having a mesh will reduce the chance of long-term, or chronic, pain following an inguinal hernia repair. This is not the case and may even increase the risk of chronic pain.

Can the inguinal hernia be repaired using keyhole techniques?

Inguinal hernias can be repaired using a keyhole or laparoscopic technique. Laparoscopic operations can only be carried out under a general anaesthetic.

There are two types of laparoscopic inguinal hernia repair TAPP and TEP.

The transabdominal pre-peritoneal (TAPP) and totally extra-peritoneal (TEP) repairs both require a small camera being placed via a small incision near the umbilicus. The TAPP approach goes fully inside the abdomen and the TEP approach stays outside of the abdominal cavity just behind the abdominal wall muscles.

In both cases the hernia sac is identified, pulled or pushed back into the abdomen and then the weakness or defect in the abdominal wall is repaired with a plastic mesh.

The recovery process and time in hospital is similar for both laparoscopic and open repairs of inguinal hernias.

What are the risk factors for hernia surgery?

All operations have risks associated with them. The following are those related to inguinal hernia repair either open or laparoscopic:

- Infection of the wounds or mesh – including mesh removal
- Bleeding/Bruising around wound, base of penis and scrotum
- Pain (chronic – lasting more than 6 months)
- Recurrence of the hernia
- Damage to the spermatic cord (men) or round ligament (women)
- Damage to the bowel, bladder, great vessels or other major structures
- Testicular shrinkage
- Testicular death or removal
- Collection of fluid (seroma)
- Deep vein thrombosis or pulmonary emboli
- Stroke or mini-stroke
- Heart attack
- Risk of a general anaesthetic, including the rare incidence of death

What happens prior to the operation?

The secretary will organise a day for the operation and the hospital will give you admission details. You will be contacted approximately one week before the date of the operation by the Manor Hospital who will arrange a pre-operative assessment appointment which will take place at the Manor Hospital. Routine blood tests and blood pressure tests form part of the pre-operative assessment. The surgeon will go through the procedure again with you on the day of your operation and take your consent. The anaesthetist will also visit to discuss the general anaesthetic and your post operative pain relief.

Is it painful following the operation?

Any operation gives some degree of discomfort and inguinal hernia surgery is often quite sore.

The surgical incisions on your abdomen will have been injected with local anaesthetic at the end of the operation and are normally quite comfortable at the end of the operation. Most patients require some simple pain killers (analgesia) for 7-10 days after the operation, which will be prescribed on discharge from the hospital.

It is important to take the analgesia regularly for 72 hours post-operatively. Then after this time the analgesia can be reduced as you need it.

Non-opioid medication is prescribed alongside some opioids. If do not want to have opioid analgesia prescribed, then this can be arranged.

If worsening abdominal pain occurs whilst at home then immediate contact with a doctor, or attendance to the Accident and Emergency department, for further evaluation should be carried out.

Any general concerns then please contact a medical secretary on 07951 601722.

How soon can I go home?

After an inguinal hernia operation it is normal to feel well enough to go home on the same day as the operation. If a general or spinal anaesthetic has been administered then a minimum stay of at least six hours after the operation is required to ensure there are no immediate post-operative problems. You will be discharged once you are fully mobile, passed urine and comfortable. Most patients require 2-3 days of pain medication but should be fully functional during this period.

If your operation is at The Manor Hospital in Oxford, and Mr Bond-Smith is your Consultant Surgeon, then you will be advised to stay overnight so that Mr Bond-Smith can review you in the evening of your operation and then again in the morning after your operation to answer any questions and to ensure you are comfortable throughout your stay.

How long will it take for me to recover from the operation? What exercise can I do following the operation?

It is possible to mobilise very quickly after the operation especially if the operation has been carried out under local anaesthetic.

It is recommended lifting nothing heavier than a kettle for two weeks following the operation to repair an inguinal hernia. So it is best to avoid carrying heavy shopping bags or laundry.

Gentle walking for 15-20 minutes, twice a day, for the first two weeks is expected as part of the recovery programme. Activity can then be built up as tolerated until at 6 weeks all normal daily living activities and exercise programmes have been resumed.

When can I drive?

It is possible to drive when the foot can be stamped down to do an emergency stop and the blind-spot can be viewed without discomfort.

What happens with my dressings?

All the wounds are closed with dissolvable stitches under the skin and nothing needs to be done to these after the operation. Each wound is covered with a waterproof glue. The stitches will disappear on their own and the glue will flake off after 7 days.

This manner of closing the wounds allows the patient to have a shower or bath immediately post-operatively. However long soaks in the bath are to be avoided in the first few days.

If having a laparoscopic operation then the wound near the bellybutton may ooze clear fluid, or even a creamy looking fluid, and takes a bit longer to heal than the other wounds. This is nothing to worry about.

The major red flags relating to wound healing are:

- The wound turning a bright red colour
- The wound becoming very hot
- The wound becoming excessively tender
- The wound becoming swollen

You will be booked in for a 2-week wound check at the Manor Hospital in Oxford to ensure that the wound is healing normally. This appointment can be brought forwards if required.

If you have any worries about your wounds, you should contact Mr Bond-Smith's medical secretary on 07951 601722.