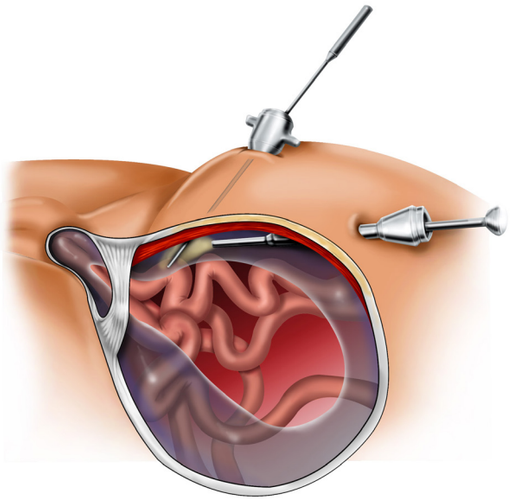
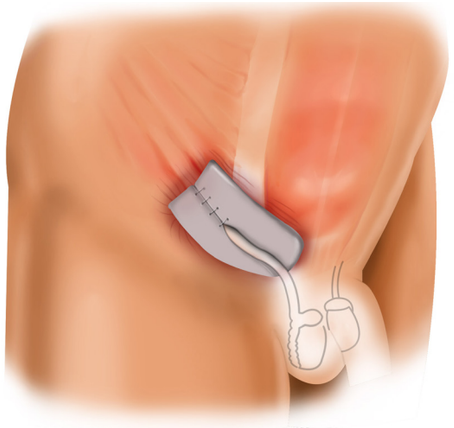
## Is keyhole surgery for all?

There are a number of reasons why keyhole surgery is not recommended:

- Keyhole surgery requires a general anaesthetic
- Very large hernias are not suitable for keyhole repair
- Some patients who have had extensive lower midline surgery may not be suitable candidates for keyhole surgery.





## What happens after surgery?

Most people are able to go home on the day of surgery. Painkillers should be taken regularly for the first couple of days. Some painkillers cause constipation so it is advisable to drink plenty of fluids. Sometimes a stool softener such as lactulose will help.

- Depending on the type of surgery you have, the need and frequency for pain relief will vary. After open surgery pain relief may be needed for longer.
- Wear supportive underwear such as Y-fronts for comfort.
- For the first few days you should do no heavy lifting but you can move around the house normally. You should be comfortable at rest.
- After a week most daily activities should be comfortable.
- If there is redness or weeping of the wound, this may indicate an infection. You should contact your own doctor or the specialist immediately in order to get some antibiotics. This should then resolve.
- The stitches do not normally need removal as they will dissolve with time. The waterproof dressings may be removed after a week; the other dressings may stay until clinic follow-up at the two-week stage.
- You should not drive a motor vehicle for one week after a keyhole repair and two weeks after open surgery.
- Follow-up after surgery is normally at about two weeks.

## When do I get back to normal?

### *After Keyhole Surgery*

Your return to normal activities should be guided by common sense and the degree of pain experienced. A rapid return to normal is common. By the second week, there is little limitation on normal activities.

### *After Open Surgery*

Your return to normal activity takes longer by a week or two than keyhole surgery.

## Costs

Costs are dependent on the type of operation you choose and the cover provided by your insurer. If you have no insurance, the cost will be higher.

Costs are based on fees for the surgeon and anaesthetist (including any clinic visits), the hospital stay and theatre time, and the cost of equipment used. Laparoscopic costs tend to be slightly higher because of extra equipment used. Estimates of costs can be provided.

Sometimes there are additional costs for radiology, pathology or other specialist tests. It is worth checking with your insurer to see what is covered by your policy.

If the hernia is a consequence of an accident and is covered by ACC, the operation may be fully or partially funded. This needs to be discussed.

**P** 04 381 8120

**F** 04 381 8121

**e** info@wellingtonherniaclinic.co.nz

**www.wellingtonherniaclinic.co.nz**

WELLINGTON
hernia clinic
SOLUTION FOCUSSED PRACTITIONERS

# *Your hernia – symptoms, diagnoses and treatment*

WELLINGTON
hernia clinic
SOLUTION FOCUSSED PRACTITIONERS

www.wellingtonherniaclinic.co.nz

## What is a hernia?

A hernia is simply a lump in the abdominal (body) wall caused by a weakness in the muscle. The hernia may contain structures like fat or sometimes gut. With time the weakness in the body wall that appears as a bulge will gradually enlarge as the contents of the hernia begin to protrude more. Most commonly these are inguinal hernias.

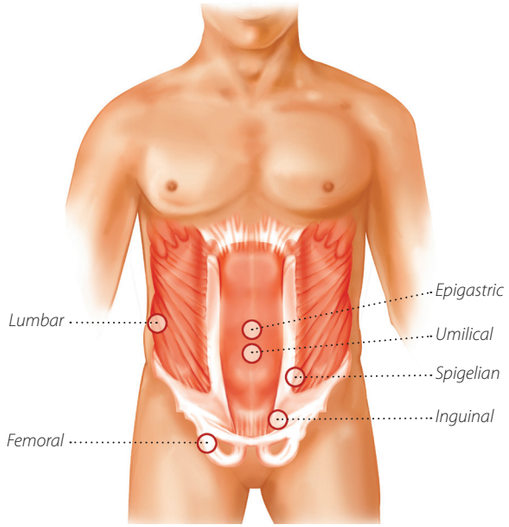
## What are the symptoms caused by hernias?

Hernias normally present as a lump. Sometimes pain may be the only symptom, especially in a small hernia. Small hernias can be difficult to find and an ultrasound scan may be necessary. For many patients, an examination by the doctor or specialist is enough to confirm a hernia. Typically the lump will disappear when lying down.

We worry about hernias because of the risk of "strangulation" – this means that the structures in the hernia lose their blood supply and die. This is dangerous; for some types of hernia this risk is low, whilst for others it is much higher.

When a hernia and its contents can no longer be pushed back into the tummy (irreducible hernia) it is at risk of strangulation. A strangulated hernia can lead to gangrene within six hours. These conditions require urgent surgery.

***Hernia Sites***




## How is a hernia diagnosed?

Your family doctor or specialist will be able to perform a simple examination to confirm a hernia. Sometimes an ultrasound scan is necessary. Up to a quarter of patients with inguinal hernias will go on to develop hernias on the other side.

### What is an inguinal hernia?

Inguinal hernias occur in the groin and are divided into two groups:

- **Indirect inguinal hernia.** This is the most common of all hernias, and occurs in all age groups. In children they may be present at birth. In adult males, about two-thirds of inguinal hernias are indirect, and over half are on the right. Twelve percent are bilateral. They are 20 times more common in men than women.
- **Direct inguinal hernia.** These hernias make up about one-third of inguinal hernias and are always acquired over time. Risk factors for direct hernias include smoking and chronic cough as well as occupations where there is much heavy lifting.

## Other types of hernia

**Femoral hernia** These are more rare and prone to complication. Typically they are found in middle aged and older women. The lump is lower than that seen in an inguinal hernia and an experienced doctor can normally discriminate. They require repair.

**Ventral hernia** (in the front wall of the abdomen (tummy)) Umbilical hernias, paraumbilical hernias and epigastric hernias are all hernias in the midline of the abdomen occurring between the bottom of the chestbone and the umbilicus (belly button). Their name describes their position.

**Epigastric hernia** These are usually small defects in the linea alba (the midline of the muscular wall of the abdomen). They probably occur as a result of a weakness in the muscle fibres in this area. Normally they are too small to allow the bowel to enter and only contain fatty tissue.

**Umbilical hernia** These usually occur in children through a weak umbilicus (belly button). In children under two, they are usually managed expectantly. After the age of two, surgery is usually offered.

**Paraumbilical hernia** In adults the hernia does not occur through the umbilical scar but rather through a small defect just above or below the umbilicus (belly button). These can become very large; however, the neck of the hernia may often remain small. They occur far more frequently in women for a number of reasons.

## Does it require surgery?

Most doctors believe hernias need intervention, normally by surgery. However, there is some evidence (**www.clinicalevidence.bmj.com**) that hernias with no or little symptoms may be managed by watchful waiting. If these hernias become symptomatic, they should be repaired.

For most groin hernias surgery is the treatment of choice; this is the most common general surgical operation and all general surgeons are experienced in the repair of inguinal hernias. About 5% of hernias require emergency surgery because they become irreducible or strangulated. This means the structures in the hernia lose their blood supply, which can be very dangerous.

### How is the surgery performed?

Surgery is the treatment of choice. In adults this is normally achieved by either an open approach or via a laparoscopic approach (keyhole). In both methods the hernia is repaired and normally reinforced with a "mesh". This mesh is a man-made material that is normally permanent and allows a "tension-free" repair with a much lower incidence of recurrence of the hernia.

For children and young adults a mesh is not necessary.

### What are the benefits of surgery?

Once hernia surgery is performed the bulge should disappear. The pain or discomfort should also go once you've healed after the surgery.

The advantages of keyhole surgery are that there is less pain and a lower chance of numbness. The pain following the procedure should also last for a shorter time. But about 10% of patients still have some pain at one year after keyhole surgery; for open surgery this is 20%.

### What are the risks of surgery?

All operations carry risks. These should be discussed with you as a part of the informed consent process.

- Nausea (feeling sick) can occur after anaesthesia. Serious complications from anaesthesia are rare.
- Bleeding and bruising after hernia surgery occurs in about 10% of patients. This can lead to a large bruise called a haematoma. Sometimes there is a build-up of fluid under the skin called a seroma (in about 5% of patients).
- Accidental damage to other organs such as the bladder is rare in open surgery but can occur in some forms of keyhole repair. This may require further surgery to correct this. Nerve damage may cause numbness or pain.

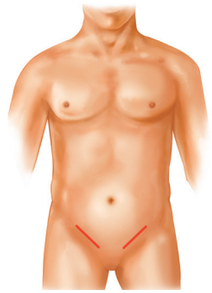
## Keyhole versus open surgery

Keyhole surgery has many advantages over open surgery:

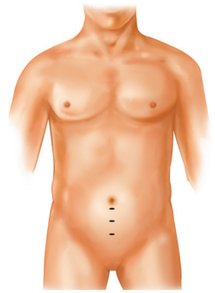
- Because of the smaller cuts there is less pain and an earlier return to normal. If there are hernias on both sides, this is especially so.
- The mesh is placed deep to all the layers. This is mechanically in a better position than when placed via the open route.
- There is a lower risk of damage and irritation of the nerves in the groin.

### What are the disadvantages of keyhole surgery?

- The operation can take longer.
- Cost: because of the additional, often disposable, equipment, the cost can be higher than open.
- In the rare circumstance of a mesh-related infection it can be more difficult to remove the mesh.



*Open surgery*



*Keyhole surgery*

## Do hernias come back?

With all hernia repairs there is a risk of the hernia recurring. Rates of recurrence of up to 6% are recognised. If there is recurrence after an open operation normally it is better to repair it using the keyhole approach.