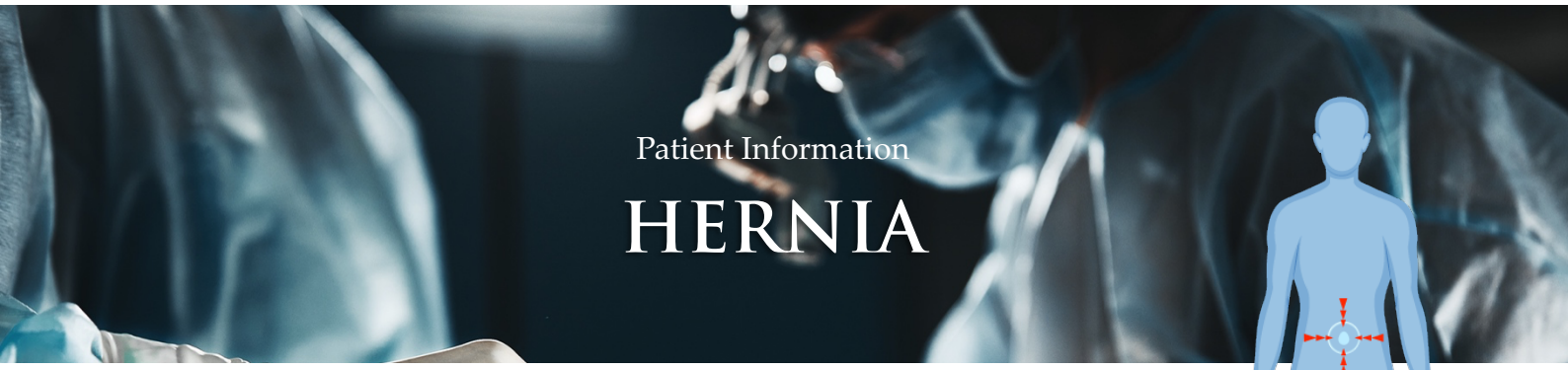
ALISTAIR ROWCROFT
GENERAL & HPB SURGEON

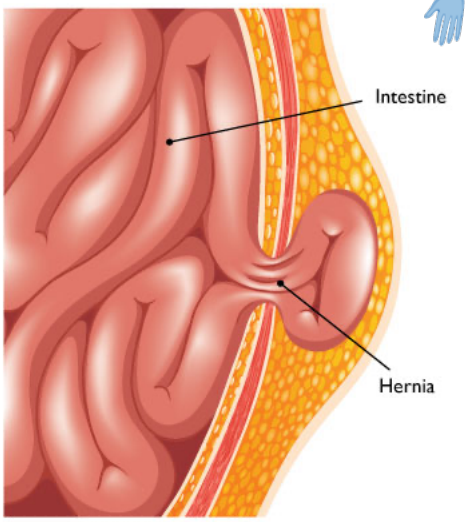


Patient Information

HERNIA

What is a hernia?

A hernia is a weakness in the abdominal wall, with protrusion of the abdominal contents through this weakness. This protrusion can contain fat from inside the abdomen, and less commonly other organs, including bowel and bladder.



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Why do hernias occur?

Hernias commonly occur in several locations where normal structures leave or enter the abdomen. This includes the belly button (umbilicus) and groin hernias (inguinal or femoral). Hernias can also occur at the site of previous abdominal surgery, often referred to as an incisional or ventral hernia. This can result from problems with wound healing around the time of recovery from major surgery, or technical issues with closing the abdomen.

Patients are more likely to have hernias if they have weaker collagen formation than usual. Research has shown that differences in the ratios of certain collagen subtypes can predispose patients to hernia formation. These differences are genetic, meaning that they are part of your DNA and cannot be changed. Practically this means that if you have had a hernia previous, you are more likely to have another hernia in the future. In addition, hernias can tend to run in families.

What problems can hernias cause?

Typically, hernias cause a lump that can be felt by the patient. This is usually worst with activities that increasing pressure inside the abdomen, such as standing, straining, coughing or lifting. Most hernias will slide back into the abdomen when lying down, and sometimes can be pushed back in, which is known as a "reducible hernia". Hernias that have been present for a long time can become large enough so that they can't be pushed back in, and these are known as "irreducible hernias". These hernias often cause pain.

When a hernia contains an organ such as bowel, the bowel can become blocked. Symptoms of bowel obstruction include pain, vomiting, abdominal distension and failure to pass flatus or faeces. An irreducible hernia can be so severe that the blood supply to the bowel is compromised, which causes severe pain and is a surgical emergency.

How are hernias treated?

Hernias are best treated with surgery. This surgery requires a general anaesthetic, and involves placing the contents of the hernia back into the abdomen, and repairing the hole or weakness. This often involves the placement of mesh.

For groin hernias, this operation can often be done with keyhole ("laparoscopic") surgery. The recovery is faster than for a traditional open repair, and carries a lower risk of long term pain following surgery. Incisional hernias are repair through an open or laparoscopic approach, depending on the size of the hernia.

The placement of mesh is an important consideration in hernia surgery. Mesh is a synthetic product designed similarly to a lattice. Its placement allows the ingrowth of healing tissue from the body following the repair, which results in a "scar net" that is very strong. The aim is to prevent further weakness in the repair and reduce the risk of the hernia occurring again.

Inappropriately used or placed mesh can cause issues such as mesh erosion and chronic pain. These issues have mainly been associated with mesh used in gynaecological surgeries, not hernia repairs. It is important to note that mesh use in most hernia repairs is standard in Australia. If you have questions about which mesh will be used in your operation please discuss them with your surgeon Dr. Rowcroft.

What is the recovery from hernia surgery?

This depends on the site and size of the hernia, and if the surgery is performed open or laparoscopically. Generally speaking, most patients with umbilical or groin hernias are admitted for a one night stay after their hernia repair. Patients with larger incisional (ventral) hernias will often stay 2-3 days in hospital, depending on their pain levels.

At the time of discharge, you will be comfortable enough to undertake normal daily activities at home, including showering and dressing yourself. Most patients have some mild discomfort that is managed with simple painkillers, such as Paracetamol or Ibuprofen. As a result, most patients can resume office-based work after 1 to 2 weeks, and normal exercise after 3-4 weeks. Patients undergoing open hernia repair should not undertake heavy lifting for 6 weeks. It is important to stay active and mobile after any major abdominal surgery, and walking and climbing stairs can safely be undertaken from the day after your hernia repair.

What are the complications of hernia surgery?

Hernia surgery, like all surgery, has inherent risks. These include risks common to all surgical procedures, including:

- Infection
- Bleeding. If severe this may require a blood transfusion or more surgery to fix.
- Bloods clots, such as Deep Vein Thrombosis (DVT) and Pulmonary Embolism (PE)

The risks specific to hernia surgery include:

- Recurrence of the hernia (1-2%). This often will require another procedure to fix.
- Temporary urinary retention (inability to pass urine) immediately following the procedure. This is usually fixed by placing a urinary cather in the bladder, which can then be removed at a later date.
- Chronic (long term pain). This can happen in up to 10% of groin hernia patients undergoing an open repair.
- Mesh infection. Once an infection reaches the mesh, it is often impossible to resolve with antibiotics, and requires an operation to remove the mesh. This type of infection is reduced greatly with laparoscopic surgery.
- Damage to the blood supply of the testicle (<1%). This can result in pain and swelling, and in the worst cases can require surgical removal of the testicle.