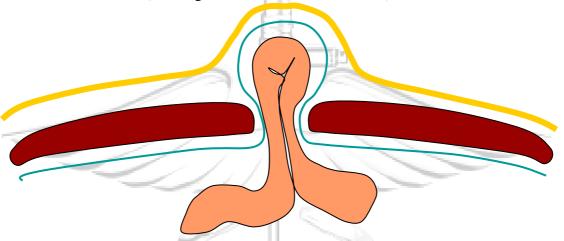
#### What is a hernia?

A hernia is normally a hole or weakness in the muscle wall surrounding the stomach and bowels. It most commonly occurs in the groin (an inguinal or femoral hernia), where bowel or fat pushes out through the weakness and presents as a lump. Sometimes, people notice pain in the groin before a lump appears. This could be a sign of an early hernia. Hernias also occur at other weak points in the muscle wall such as the belly button (umbilicus) or in the diaphragm. The stomach can push up through a hole in the diaphragm, into the chest. This is known as a hiatus hernia and can lead to acid reflux (see surgical treatment for acid reflux).



Hernias are more common if you are overweight or cough a lot (associated with asthma, bronchitis or smoking). They can also occur if the muscle has been weakened by previous surgery or infection.

## **Should I have my hernia treated?**

If hernias become large or uncomfortable then it is recommended that they are treated. Treatment involves repairing the muscle weakness with an operation. A small painless hernia can be left, but if you are young it is likely to cause problems in the future and is often better treated early when surgery is more likely to be successful.

If a hernia lump pushes out, becomes painful and does not want to go back in then this needs urgent medical attention. If left there is a possibility that bowel can block in the hernia and may need to be removed. This is serious and potentially life threatening.

Operative treatment involves closing the hole and repairing it with stitches or a gauze patch to stop it coming back. This can either be done via a cut through the muscle wall over the hernia lump (open operation), or through small cuts where the gauze is placed below the muscle (laparoscopic operation).

# Advantages of a Laparoscopic (keyhole) procedure:

- 1. Less pain. Laparoscopic procedures usually cause less pain because they are performed through smaller holes.
- 2. Less time in hospital. Because less pain relief is needed and people are generally more mobile sooner after laparoscopic surgery.
- 3. Quicker return to work. There are often no restrictions to activity after laparoscopic hernia repair. Return to full normal activities such as work and sport is often a lot sooner.
- 4. Fewer complications. Complications such as infection, nerve damage and long term pain are less common after laparoscopic than open surgery.

## Advantages of an open procedure:

- 1. Many open hernia operations can be performed with a local anaesthetic. This means that you are awake during the operation. Local anaesthetics can be safer than general (asleep) anaesthetics particularly if you are older or have other medical problems.
- 2. If you have a lot of loose skin at the site of a hernia, this can be removed at the same time as the hernia repair, reducing the possibility of fluid collecting under the skin.

Your surgeon will discuss the surgical and anaesthetic options with you before the operation. Both should be tailored to an individual persons needs. Generally, unless you are extremely unfit, a laparoscopic procedure should be offered.

#### Types of hernia treated by laparoscopic surgery:

- 1. **Inguinal hernia.** The most common type of hernia in the groin. Appears as a lump or discomfort. A weakness without an obvious lump can cause pain in active young men. This may be due to a 'Sportsman's Groin'. Both a hernia and sportsman's groin can be successfully treated by laparoscopic repair.
- 2. **Femoral hernia.** A more unusual groin hernia causing pain and a small lump at the top of the leg. More common in women than men.
- 3. **Umbilical hernia.** A lump appearing at or near the belly button (umbilicus). These hernias are often pain free but can start to cause problems as they get bigger.
- 4. **Incisional hernia.** A lump can occur below a previous operation scar. This type of hernia commonly causes pain and may cause a blocked or twisted bowel if left.
- 5. **Hiatus hernia.** Stomach or bowel can push up into the chest cavity. Laparoscopic repair is recommended if the hernia is large or associated with acid reflux.

#### What are the risks of surgery?

All operations carry some degree of risk. The risks associated with hernia surgery are very small. There is a very small risk of heart or breathing problems related to having an anaesthetic. There is a small risk of wound infection or bleeding. There is a risk of nerve or blood vessel injury leading to numbness or chronic pain after the operation. In men, during recurrent groin hernia surgery there is an increased risk of damage to the blood supply to the testicle on that side. These are all less with laparoscopic surgery compared to open surgery. There is a risk of developing a fluid collection where the hernia used to be. The risk of this is greater with laparoscopic surgery than with open surgery. There is a risk of a recurrent hernia. In experienced hands, this risk is the same for laparoscopic as it is for open surgery. The risk of recurrence should be less than 1 in 20, although this can increase to 1 in 3 for certain types of hernia.

With larger hernias such as incisional or hiatal hernias there is a small but significant risk of damage to bowel or stomach during the procedure. This may mean that the procedure would have to be abandoned after the damage is repaired. If not identified immediately, such damage is likely to require further surgery and in rare circumstances can potentially be life threatening.

#### Day Surgery:

Most laparoscopic hernia operations are carried out as day surgery, without the need for an overnight stay. When you arrive you will be admitted to the ward area by the attending nurse. You will be seen by the surgeon and anaesthetist prior to the operation and will have opportunity to ask any questions you may have.

The surgeon will confirm with you the type of operation that has been agreed, will explain the operation in detail, including any potential complications. You will be asked to sign a consent form if this has not already been done and the site of the hernia will be marked with a pen.

You will be asleep during the procedure if it is laparoscopic. The surgeon makes small cuts (usually three), all less than a centimetre long. A camera is inserted underneath the muscle and gas used to open the space. The hole in the muscle is identified. It may contain fat or bowel which is replaced in its original position. The hole is then covered with a sheet of mesh, which closes the hole and stops bowel pushing back out again. The mesh is sometimes secured in place with stitches or metal clips. The small skin holes are then closed with stitches or glue.

It is usual to feel some discomfort when you wake, but this can be easily controlled with simple pain killers. There is normally no restriction to activity after laparoscopic hernia surgery. In fact we encourage you to get up and walk about straight away after surgery. This reduces the risk of complications such as blood clots and allows for an earlier recovery.

Most people should be able to return to full, normal activity within 1-2 weeks after laparoscopic hernia surgery. If your work involves particularly heavy exertion you may prefer to have a longer period of recuperation. We would be happy to discuss this with your occupational health department.

# **Looking after your wounds:**

The glue used to close your wounds both holds the wound together and acts as a bandage to protect from infection.

When dry the glue looks like a scab which should not be picked off. The scab will gradually lift off after 7-10 days.

It is OK to shower after surgery. The wounds can get wet, but should be gently patted dry with a clean towel. Avoid soaking for long periods or applying oils or creams as this may weaken the glue.

If the wound is on an area that rubs on clothes, you may wish to cover the glued area with a light dressing. On the rare occasion of the wound opening or weeping then a dressing should also be applied.

If the wound becomes red, painful or swollen, or if you have any concerns, you should seek urgent medical advice.

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