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Hernia

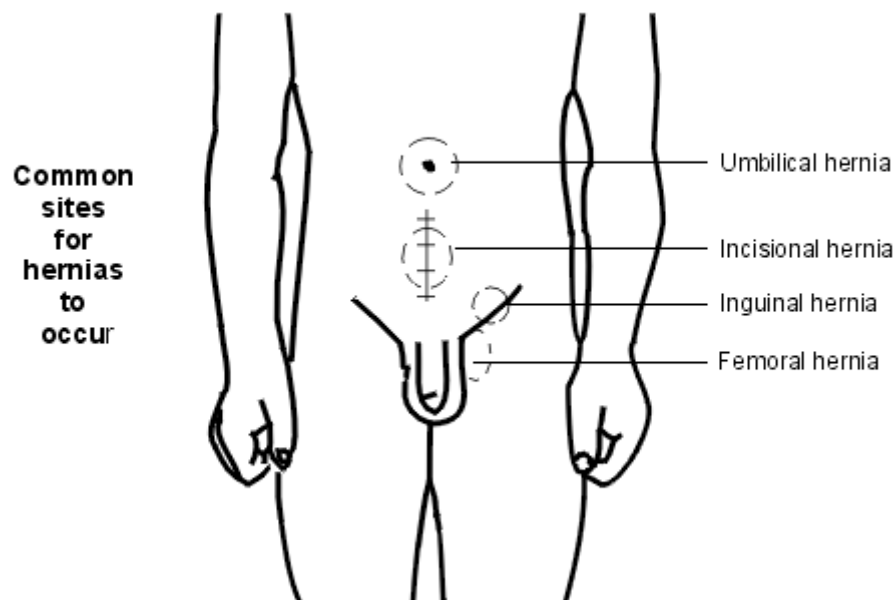
A hernia occurs when an internal part of the body pushes through a weakness in the surrounding muscle or tissue wall. This article deals with abdominal hernias which occur when a weakness in the wall of the tummy (abdomen) results in some of the internal contents bulging through. Most hernias need treating by performing an operation. There are now various different types of operation which can be performed to repair hernias. They are usually very successful.

What is a hernia?

A hernia (or 'rupture') occurs when an internal part of the body pushes through a weakness in the surrounding muscle or tissue wall. This article deals with abdominal hernias, where there is a weakness in the wall of the tummy (abdomen) which results in some of the contents within the abdomen pushing through (bulging) under the skin. Normally, the front of the abdomen has several layers comprising skin, then fat, then muscles, which all keep the guts (intestines) and internal tissues in place. If, for any reason, there is a weak point in the muscles then part of the intestines can push through. You can then feel a soft lump or swelling under the skin.

What are the types of hernia?

Different types of hernia can occur. The most common types are listed here:



Inguinal hernia

This is the most common type of hernia. Males are more likely to have inguinal hernias, as they have a small tunnel in the tissues of their groins which occurred when they were developing as a baby. This tunnel allowed the testicles (testes) to come down from the tummy (abdomen) into the scrotum. Tissue from the intestines can also pass into this tunnel, forming an inguinal hernia.

There are two main types: indirect hernias, which are usually congenital and common in boys, and direct hernias, which are more common in adult men. They can occur in both sides of the body.

Femoral hernia

This also occurs when some tissue pushes through in the groin, a little lower down than where an inguinal hernia occurs. They occur more commonly in women. They tend to be smaller than inguinal hernias

Incisional hernia

This occurs when tissue pushes through a previous scar or wound. They are more common if you have had a scar in the past that has not healed well. For example, if the wound had an infection after the operation. They usually occur within two years of having an operation.

Umbilical and paraumbilical hernias

These occur when some tissue pushes through the abdomen near to the belly button (umbilicus). Umbilical hernias can be present from birth and in most cases the hernia goes back in and the muscles re-seal on their own before the baby is 1 year old. They will generally be repaired if they persist beyond 5 years of age or if they are very large.

Umbilical hernias may develop in adults with being overweight (obesity) and excessive accumulation of fluid within the peritoneum of the abdomen. The peritoneum is a lining of the abdomen and consists of two layers, one which lines the abdominal wall and the other which covers the organs in the abdomen.

Paraumbilical hernias occur in adults and appear above the umbilicus. Although they are generally small, they usually need repairing because there is a risk of intestines contained within them becoming strangulated (see below).

Who develops hernias?

Hernias in adults may arise as a result of the strain which raises the pressure in the tummy (abdomen), causing a weakness or tear in the abdominal wall. This can be caused by:

- Persistent coughing.
- Being overweight or pregnant.
- Lifting, carrying or pushing heavy loads.
- Straining on the toilet.

Inguinal hernias are more common in males, whereas femoral and umbilical hernias are more likely to occur in females.

What are the symptoms?

Sometimes a hernia is noticed after a strain - for example, after lifting a heavy object. Sometimes one may develop for no good reason and you may simply notice a small lump, usually in the groin area. Usually, at first, the lump can be pushed back but may pop out after straining again. Coughing is a common strain that brings them out. The swelling often disappears when you lie down.

Hernias are not usually painful but many people feel an ache over a hernia, which worsens after doing any activity. In time, they might become bigger as the gap in their muscle or ligament tissue becomes larger. Sometimes, in men, they track down into the scrotum.

Why do they need treatment?

Although having a hernia is not usually a serious condition, and may not require treatment, at times treatment to fix it may be advised for two reasons:

- It may gradually become bigger and more uncomfortable.
- There is a small chance it might strangulate. A hernia strangulates when too much bowel (intestine) comes through the gap in the muscle or ligament and then it becomes squeezed. This can cut off the blood supply to the portion of intestine in the hernia. This can lead to severe pain and some damage to the part of the intestines in the hernia. A strangulated hernia is uncommon and is usually dealt with by emergency surgery. However, it is preferable to have the hernia fixed by routine rather than by emergency surgery.

The risk of strangulation is greater with a femoral hernia than with an inguinal hernia. The risk is also greater with smaller hernias.

How are hernias repaired?

A hernia can be fixed by a small operation. Wearing a support (truss) was a method used in the past but is now not recommended.

A hernia repair is one of the most common operations performed by surgeons. It is very common for people to have their hernia repaired as a day case so that there is no need to stay overnight in hospital. A hernia can either be repaired under a local or a general anaesthetic. This will depend on the actual type of operation needed.

The type of operation will depend on the type of hernia that you have. A brief overview is given below. There are now various different ways of repairing a hernia, which will depend on many factors. For example, the type of hernia, the size of the hernia and your general health. Your surgeon will be able to discuss the type of operation with you in more detail.

Inguinal hernia repair

This can be done by opening the tummy (abdomen) or by a 'keyhole' operation. The keyhole option is becoming more popular with surgeons as the recovery is quicker compared to having an open operation. However, research suggests that there is little difference in complication rates between the two procedures. The keyhole operation is performed through three tiny cuts, the largest of which is only around 1.5 cm in size.

It is more common that inguinal hernias be repaired by using a mesh. This is a thin sheet of material which is usually stitched or glued over the hole of the hernia. This has been shown to be stronger and more effective than sewing the edges of the hole together for inguinal hernias. With time, the mesh safely becomes incorporated into the muscle layer, which results in a very strong, permanent repair.

Femoral hernia repair

As the hole through which a femoral hernia has to pass is very tight, there is a significant chance that any bowel that passes into it will become strangulated. This means that a femoral repair should be repaired early. Like inguinal hernias, femoral hernias are usually repaired using a mesh although some surgeons favour open repair.

Incisional hernia repair

Incisional hernias vary enormously in size, which means that treatment may differ depending on the size of the incisional hernia. Again, a mesh is usually used, especially for larger hernias.

Umbilical and paraumbilical hernia repair

Smaller hernias are usually repaired by an operation which simply closes the defect with stitches. However, umbilical and paraumbilical hernias over 2 cm in length are usually repaired by using a mesh.

Newer techniques mean that people tend to be off work for much shorter periods than in the past. Even workers in heavy work can often be back in two weeks. The operation is usually very successful. However, hernias can return (recur) in a small number of people, when a further operation may be advised.

Now read about **Inguinal Hernias**

Further reading & references

- Currie A, Andrew H, Tonsi A, et al; Lightweight versus heavyweight mesh in laparoscopic inguinal hernia repair: a meta-analysis. *Surg Endosc.* 2012 Aug 26(8):2126-33. doi: 10.1007/s00464-012-2179-6. Epub 2012 Feb 7.
- Castorina S, Luca T, Privitera G, et al; An evidence-based approach for laparoscopic inguinal hernia repair: lessons learned from over 1,000 repairs. *Clin Anat.* 2012 Sep 25(6):687-96. doi: 10.1002/ca.22022. Epub 2012 Jan 24.
- Bittner R, Schwarz J; Inguinal hernia repair: current surgical techniques. *Langenbecks Arch Surg.* 2012 Feb 397(2):271-82. doi: 10.1007/s00423-011-0875-7. Epub 2011 Nov 25.

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