

## **Inguinal hernia repair Patient Information**

### **Introduction**

A hernia occurs when an internal part of the body pushes through a weakness in the muscle or surrounding tissue wall.

Your muscles are usually strong and tight enough to keep your intestines and organs in place, but a hernia can develop if there are any weak spots.

### **What is an inguinal hernia?**

An inguinal (pronounced "ingwinal") hernia is the most common type of hernia. It can appear as a swelling or lump in your groin, or as an enlarged scrotum (the pouch containing the testicles). The swelling may be painful.

The lump is often more noticeable when you're coughing or sneezing. Lifting something may sometimes make the lump a bit bigger, and it usually disappears when you lie down.

### **What causes an inguinal hernia?**

An inguinal hernia usually occurs when fatty tissue or a part of your bowel, such as the intestine, pokes through into your groin at the top of your inner thigh.

It pushes through a weak spot in the surrounding muscle wall (the abdominal wall) into an area called the inguinal canal.

Inguinal hernias occur mainly in men. Most are thought to result from ageing, although they can occur at any age. This is because as you get older, the tissues surrounding your abdomen (tummy) can become weaker.

Inguinal hernias can sometimes appear suddenly after putting pressure on the abdomen, such as straining on the toilet if you have constipation. They have also been linked to having a persistent, heavy cough. Lifting a heavy object is rarely if ever a cause of a hernia, but can make a smaller hernia get bigger so that you now notice it.

### **When is surgery needed?**

Inguinal hernias can be repaired using surgery to push the bulge back into place and strengthen the weakness in the abdominal wall.

The operation is usually recommended if you have a hernia that causes pain, or persistent symptoms, that interfere with your enjoyment of life both at work or play, or if any serious complications develop.

Complications that can develop as a result of an inguinal hernia include:

obstruction – where a section of the bowel becomes stuck in the inguinal canal, causing nausea, vomiting and stomach pain, as well as a painful lump in the groin

strangulation – where a section of bowel becomes trapped and its blood supply is cut off; this requires emergency surgery within hours to release the trapped tissue and restore its blood supply, so it doesn't die

Surgery gets rid of the hernia to prevent any serious complications, but there's a chance it could return after the operation.

### **Do I have to have an operation?**

The short answer is no. If you have a swelling, but it goes away easily on lying down, you are able to work, or exercise and do most things you want to do in life with no or minimal discomfort, there is no rush to have an operation. But your hernia will get bigger with time, and eventually cause more symptoms. That is a good time to consider an operation.

There are a lot of rumours or old wives tales about what you can or cannot do if you have a hernia. In short, you can do whatever you want to do if the activity causes no or little discomfort. As the discomfort level rises, you will be less keen to continue the activity, and it is sensible to avoid such

activity further. As the hernia starts to interfere with your life, that is a good time to see a surgeon and discuss if an operation to repair the hernia is the right thing for you to do.

### **What happens during surgery?**

There are 2 ways an inguinal hernia repair can be performed:

open surgery – where one cut is made to allow the surgeon to push the lump back into the abdomen.

laparoscopic (keyhole) surgery – a less invasive technique where several smaller cuts are made, allowing the surgeon to use various special instruments to repair the hernia.

There are advantages and disadvantages to both methods. The type of surgery you have depends on which method suits you and your surgeon's experience.

You should be able to go home the same day or the day after surgery. It's important to follow the hospital's instructions on how to look after yourself. This includes eating a good diet to avoid constipation, caring for the wound and not straining yourself too soon.

Most people make a full recovery from inguinal hernia repair within 6 weeks, although many people can return to driving, work and light activities within 2 weeks.

### **Are there any risks from the operation?**

An inguinal hernia repair is a routine operation with very few risks. However, up to 10% of hernias come back at some point after surgery. Around 2-4% of hernias return within 3 years.

Other potential complications of inguinal hernia repair include:

blood or fluid building up in the space left by the hernia (this usually gets better without treatment)

painful swelling and bruising of the testicles or base of the penis (in men)

pain and numbness in the groin area caused by a nerve being damaged or trapped during surgery – this can cause rare but significant symptoms that can interfere with your ability to work and play.

damage to the blood supply to the testicle

damage to the vas deferens – the tube that carries sperm to the testicles

Complications are more likely if you're aged over 50, smoke or have another illness, such as heart disease or breathing problems. Remember, the risks of surgery have to be set against the risks of not operating, and how the hernia currently affects your life, if at all.

### **How it's carried out**

An inguinal hernia repair can be carried out as either open surgery or laparoscopic (or keyhole) surgery.

The hospital will send you instructions about when you need to stop eating and drinking before the operation.

The operation usually takes about an hour to complete and you'll usually be able to go home on the same day. Some people stay in hospital overnight if they have other medical problems or if they live alone.

### **Open surgery**

Open inguinal hernia repair is often carried out under local anaesthetic, although injecting the local anaesthetic can be a bit sore at the time. Sometimes you may have a general anaesthetic instead, in other words, be put to sleep. You can discuss this with your surgeon.

Once the anaesthetic has taken effect, the surgeon makes a single cut (incision) over the hernia. This incision is usually about 8-10 cm long. The surgeon then places the lump of fatty tissue or loop of bowel back into your abdomen (tummy).

A mesh is placed in the abdominal wall, at the weak spot where the hernia came through, to strengthen it.

When the repair is complete, your skin will be closed with stitches. These usually dissolve on their own over the course of a few days after the operation.

If the hernia has become trapped (strangulated) and part of the bowel damaged, the affected segment may need to be removed and the two ends of healthy bowel rejoined. This is a bigger operation and you may need to stay in hospital for 4-5 days.

### **Laparoscopic (keyhole) surgery**

General anaesthetic is used for keyhole inguinal hernia repair, so you'll be asleep during the operation.

During keyhole surgery, the surgeon usually makes 3 small incisions in your abdomen (instead of a single, larger incision).

A thin tube containing a light source and a camera (laparoscope) is inserted through one of these incisions, so the surgeon can see inside your abdomen. Special surgical instruments are inserted through the other incisions, so the surgeon can pull the hernia back into place.

There are 2 types of keyhole surgery:

Transabdominal preperitoneal (TAPP) – instruments are inserted through the muscle wall of your abdomen and through the lining covering your organs (the peritoneum). A flap of the peritoneum is peeled back over the hernia and a piece of mesh is stapled or glued to the weakened area in your abdomen wall to strengthen it

Totally extraperitoneal (TEP) – this is the newest keyhole technique. It involves repairing the hernia without entering the peritoneal cavity.

Once the repair is complete, the incisions in your skin are sealed with stitches or surgical glue.

### **Which technique is best?**

TAPP and TEP surgery has similar risks and benefits. Your surgeon will discuss this with you, in helping to decide what operation.

With keyhole surgery, there's usually less pain after the operation because the cuts are smaller. There's also less muscle damage and the small cuts can be closed with glue.

Keyhole surgery tends to have a quicker recovery time in people who:

have been treated before by open surgery and the hernia has come back (recurrent hernia) have hernias on both sides at the same time (bilateral hernias)

However, the risks of serious complications, such as the surgeon accidentally damaging the bowel, are higher with keyhole surgery than with open surgery, although these risks are very rare.

The risk of your hernia returning is similar after both operations.

Discuss the advantages and disadvantages of keyhole and open surgery with your surgeon before deciding on the most appropriate treatment.

### **Deciding which technique to use**

The choice of technique for inguinal hernia repair largely depends on:

your general health – elderly people or people in bad health may be too weak or frail to safely have a general anaesthetic, so open surgery using local anaesthetic may be advised

the experience of your surgeon – open surgery is more common than keyhole surgery, and not all surgeons have enough experience in keyhole techniques

other factors that might influence the best surgical approach for you (open or keyhole). Your surgeon will discuss this further with you.

### **Recovery**

You should be able to go home on the day of, or the day after, your operation. Get an adult to take you home in a car or taxi and follow any instructions you're given by the hospital.

After the operation, your groin will feel sore and uncomfortable. You'll be given painkillers to help relieve this discomfort.

### **Looking after yourself**

An adult must stay with you for the first 24 hours after your operation in case you experience any problems.

If you're still in pain after going home, continue taking painkillers as advised by the hospital. Applying gentle pressure to your wound using your hand, or a small pillow can make coughing, sneezing and moving between sitting and standing more comfortable.

Make sure you follow the instructions your nurse gave you about caring for your wound, hygiene and bathing.

### **Activities**

If the operation was carried out under a general anaesthetic (which puts you to sleep during your operation) , your co-ordination and reasoning may be affected for a short time. Avoid drinking alcohol, operating machinery or signing legal documents for at least 48 hours after any operation involving general anaesthetic.

Over time, you can gradually return to your normal activities as soon as you're able to do them without feeling any pain.

Most people are able to do light activities, such as shopping, after 1 or 2 weeks. You should also be able to return to work after 1 or 2 weeks, although you may need more time off if your job involves manual labour (typically 4 weeks for manual labour).

Gentle exercise, such as walking, can help the healing process, but you should avoid heavy lifting and strenuous activities for about three weeks. The main reason is that such activity causes pain – there is little evidence to suggest that such activity causes your hernia to recur.

You may find sex painful or uncomfortable at first, but it's usually fine to have sex when you feel like it.

### **Driving**

Speak to the medical professional in charge of your care for advice about when you can drive. It's usually advisable to avoid driving until you're able to perform an emergency stop without feeling any significant discomfort (you can practice this without starting your car). This is typically after a few days, although if someone else can drive for you, that is better for 1-2 weeks.

It's usually recommended that you contact your car insurance company before starting driving again – insurance companies can have their own rules.

### **When to call a doctor**

Call your surgeon if you develop any of the following symptoms:

- persistent fever over 38C (100.4F) or chills
- bleeding
- increased swelling or pain in your abdomen pain that is not relieved by painkillers
- persistent nausea or vomiting
- persistent coughing or shortness of breath
- increasing redness surrounding your incisions
- difficulty passing urine