

## **Inguinal hernia repair**

An inguinal hernia is a bulge or swelling that occurs when a part of the abdomen (tummy), such as the intestine, pushes through a weakness in the muscle of the abdominal wall in the groin. The aim of an inguinal hernia repair is to push the contents of the hernia back into place and strengthen the abdominal wall.

### **What are the alternatives to surgery?**

Most inguinal hernias generally get larger with time and don't go away without treatment. Umbilical hernias in young children usually get better on their own as the abdominal muscles get stronger. But in adults, surgical repair is recommended, particularly if you experience pain or discomfort, or if the hernia is interfering with your work or everyday activities.

### **Preparing for abdominal hernia repair**

Your surgeon will explain how to prepare for your operation. For example, if you smoke, you will be asked to stop, as smoking increases your risk of getting a chest and wound infection, which can slow your recovery. Inguinal hernia repair is usually done as a day case procedure under local or general anaesthesia. If you're having a general anaesthetic, you will be asked to follow fasting instructions. This means not eating or drinking, typically for about six hours beforehand. However, it's important to follow your surgeon's advice. Local anaesthesia completely blocks pain from the affected area and you will stay awake during the operation. However, you will also be asked to starve for about 6 hours beforehand.

Your surgeon will discuss with you what will happen before, during and after your procedure, and any pain you might have. This is your opportunity to understand what will happen, and you can help yourself by preparing questions to ask about the risks, benefits and any alternatives to the procedure. This will help you to be informed, so you can give your consent for the procedure to go ahead, which you will be asked to do by signing a consent form. You may be asked to wear compression stockings to help prevent blood clots forming in the veins in your legs.

### **What happens during abdominal hernia repair**

The operation usually takes between 30 and 50 minutes depending on the type of surgery you have. A single dose of intravenous antibiotics is given before surgery to reduce the risk of infection of the mesh. There are two main types of inguinal hernia repair – keyhole (laparoscopic) and open surgery. Your surgeon will recommend the type that is most suitable for you.

### **Open surgery**

Open repairs can be done under general or local anaesthetic. Your surgeon will make a single cut (about 7 cm long) on your lower abdomen and push the contents of the hernia back in place. He will then put a synthetic mesh over the weak spot to strengthen the wall of the abdomen. The cut on your skin is closed with dissolvable stitches.

## **Keyhole surgery**

Keyhole has particular advantages if the hernia has been repaired before and has recurred, or if you have a hernia on both sides (bilateral). There are two techniques used in keyhole surgery – totally extraperitoneal (TEP) and transabdominal preperitoneal (TAPP). Both techniques can only be done under general anaesthetic.

Your surgeon will make three small cuts (each about 1 long) on your lower abdomen. He will pass a tube-like telescopic camera (called a laparoscope) through one of the cuts to view your hernia on a monitor. Your surgeon will then push the contents of the hernia back in place. A sheet of synthetic (artificial) mesh is put over the weakness in the abdominal wall to strengthen it. In a TAPP repair, your surgeon does the operation from within your abdomen. In TEP, the whole operation is done within the layers of the abdominal wall. The cuts on your skin are closed with dissolvable stitches.

There is a chance your surgeon may need to convert your keyhole operation to open surgery. This is only done if your surgeon is unable to complete the operation safely using keyhole surgery.

## **What to expect afterwards**

After a local anaesthetic, it may take several hours before the feeling comes back into your abdomen. Take special care not to bump or knock the area. You may need to rest until the effects of the anaesthetic have passed and pain relief to help with any discomfort. If you have a local anaesthetic, you will usually be able to go home when you feel ready. You will need to arrange for someone to drive you home afterwards.

If you have a general anaesthetic, you will also need to arrange for someone to drive you home. Try to have a friend or relative stay with you for the first 24 hours after your abdominal hernia repair operation. General anaesthesia temporarily affects your co-ordination and reasoning skills, so you must not drive, drink alcohol, operate machinery or sign legal documents for 24 hours afterwards. If you're in any doubt about driving, contact your motor insurer so that you're aware of their recommendations, and always follow your doctor or surgeon's advice.

Your nurse will give you some advice about caring for your healing wounds before you go home. The length of time your dissolvable stitches will take to disappear depends on what type you have. However, for this procedure, they should usually disappear in about seven to 10 days. There will also be paper (butterfly) stitches over the wound which can be peeled off in 5 days. You will be given a date for a follow-up appointment.

## **Recovering from inguinal hernia repair**

It usually takes about two weeks to make a full recovery from inguinal hernia repair, but this varies between individuals, so it's important to follow your surgeon's advice. The time it takes to recover from keyhole surgery is usually less than open surgery. If you need pain relief, you can take over-the-counter painkillers such as paracetamol or ibuprofen. Painkillers containing codeine should be used with care as these can cause constipation. Always read the patient information that comes with your medicine and

if you have any questions, ask your pharmacist for advice. You should eat enough vegetables, fruit and high-fibre foods, such as brown rice, wholemeal bread and pasta. This helps to prevent constipation, which can cause straining and discomfort.

You should be able to return to work once you feel able, but if your occupation involves heavy lifting this can put a strain on your abdominal muscles, so you should first seek advice from your doctor.

### **What are the risks?**

As with every procedure, there are some risks associated with inguinal hernia repair. The chance of these happening are not included here as they are specific to you and differ for every person. Ask your surgeon to explain how these risks apply to you.

### **Side-effects**

Side-effects are the unwanted but mostly temporary effects you may get after having the procedure. For inguinal hernia repair these include:

- difficulty passing urine
- pain, numbness, swelling or bruising in your abdominal and groin area
- in men, some scrotal swelling for a few days

### **Complications**

Complications are when problems occur during or after an operation. The possible complications of any operation include an unexpected reaction to the anaesthetic, excessive bleeding or developing a blood clot, usually in a vein in the leg (deep vein thrombosis, DVT).

Specific complications of inguinal hernia repair include:

- wound infection
- build up of blood or fluid in the space left by the hernia
- in men, painful swelling of the scrotum or testicles
- damage to the urinary bladder, or bowel
- damage to nerves, resulting in numbness in the groin area, or persistent pain in the groin
- recurrence – the hernia may develop again

If you are a man, you may also have complications such as damage to blood vessels supplying your testicles, resulting in permanent damage. This rare complication can occur principally during open repair of a recurrent hernia.

**Please speak to your surgeon if you have any questions or worries whatsoever.**