INCISIONAL HERNIA

THE BIRMINGHAM HERNIA CLINIC

WHAT IS AN INCISIONAL HERNIA?

Incisional hernias can occur at any surgical incision site on the abdominal wall. They can occur soon after an operation or may develop months or years later. Incisional hernias are quite common and when small may go unnoticed. If incisional hernias are left untreated they will get larger with time.

WHY DO SOME PEOPLE GET INCISIONAL HERNIAS?

In some cases we simply don't know but we are aware of certain risk factors. Incisional hernias are more common after emergency abdominal surgery. Contamination of the wound during surgery, particularly bowel surgery and wound infections after surgery may lead to incisional hernia formation. Incisional hernias are more common if a wound is used for more than one operation.

Other factors that can lead to hernias are:

- Excessive coughing or straining after an operation
- Increasing age
- Steroids
- Obesity
- Smoking

HOW CAN YOU PREVENT GETTING AN INCISIONAL HERNIA?

In some cases you simply can't, but you can reduce the risk or help prevent an existing hernia getting larger by:

- avoiding heavy lifting wherever possible
- using your legs and not your back to lift heavy objects if you need to
- avoiding constipating or straining during bowel movements
- maintaining a healthy weight
- stopping smoking

WHAT SYMPTOMS DO INCISIONAL HERNIAS CAUSE?

In many cases they don't cause any symptoms at all particularly when small. Often these hernias will disappear completely when a patient lies flat (reducible).

As they enlarge they can become unsightly or noticeable through tighter clothes. They can start to give aching or dragging discomfort as they increase in size.

A hernia repair is usually advised if a hernia becomes symptomatic i.e. starts enlarging causing discomfort, or generally interfering with the activities of daily living.

Sometimes hernias will not disappear on lying flat and they may have become "irreducible".

The inability to "reduce", or push back the bulge into the abdomen usually means the hernia is 'incarcerated' which may require urgent treatment. When this happens there is a risk of other serious complications such as obstruction when a part of the bowel that is trapped in the hernia becomes blocked. This can lead to crampy abdominal pains and vomiting. If an incarcerated or obstructed hernia is not repaired, then strangulation may occur. This happens when the blood supply to a piece of bowel is cut off. If this is not repaired urgently then the affected bowel will 'die' and turn gangrenous potentially leading to more serious complications.

It should be remembered that incisional hernias are common and incarceration and strangulation are rare complications.

HOW DO WE TREAT INCISIONAL HERNIAS?

For small hernias that are not causing any symptoms a surgical repair may not be necessary. All surgery carries the risk of complication so for some patients watchful waiting is advised.

A hernia belt may be beneficial for some patients and these can provide additional support to the abdominal wall. The belt is worn over the hernia site to prevent it coming out. These belts are usually made-to-measure by a specialised appliance fitter. More modern elasticated support garments may

provide an alternative for those who wish to avoid surgery or wear a belt but there isn't any good evidence that they will prevent hernias enlarging.

A hernia repair is usually advised if a hernia becomes symptomatic i.e. starts enlarging causing discomfort, or generally interfering with the activities of daily living. Incisional hernia can vary in size from very small to very large and no single operation is suitable for all types of hernia. Your surgeon will discuss which is the best or are the best options for you.

Operations can be done as open or as keyhole procedures, again not all incisional hernias are suitable for a keyhole repair. Hernias are repaired using sutures or a combination of sutures and a mesh reinforcement. Generally sutured repairs are only suitable for smaller hernias and large hernias nearly always need a mesh reinforcement as well.

OPEN SUTURED REPAIR

Open sutured repairs are carried by cutting through the original incision. The surgeon finds the hernia and pushes it back inside the abdomen before closing the defect in the abdominal wall with strong stitches. This is the simplest type of repair and can be usually carried out as a day case procedure. This type of repair is probably associated with a higher risk of recurrence but the risks associated with infection are less.

OPEN MESH REPAIR

An incision is made over the hernia in the original incisional incision. The surgeon finds the hernia hernia and puts it back into the abdomen. Sometimes sutures are used to narrow the defect. The repair is completed by placing a piece of mesh either behind or in front of the muscles. A drain may be placed close to the repair to prevent fluid accumulating. We use absorbable stitches wherever possible to close the skin wound. In some cases, this can be carried out as a day case, some patients will need to stay in hospital at least overnight and sometimes longer. This type of repair is probably associated with a lower risk of recurrence but the risks associated with infection are greater and the mesh itself can sometimes cause problems.

KEYHOLE REPAIR

Keyhole repair may be possible for some incisional hernias. A number of small incisions are made in the abdominal wall. The hernia is identified and pulled back into the abdomen. The defect in the abdominal muscles is then covered by a synthetic mesh that is held in place on the inside of the abdominal wall with tacks. This type of repair may be performed as a day case procedure. It may not be possible to carry out a keyhole procedure particularly if there are los of adhesions from a previous operation. Overall this is a more invasive approach. It may not be suitable for very large hernias. This type of repair is probably associated with a lower risks of recurrence, compared with open sutured technique. The risk of infection is probably lower, compared with the open mesh technique.

WHAT ARE THE RISKS OF THE OPERATION?

Sometimes bruising may occur around the wound(s) or a swelling develop beneath the wound(s). This is usually blood and / or tissue fluids which accumulates in the space where the hernia was. The fluid will normally gradually resolve.

Wound infections can occur after this type of surgery. When they do occur patients may need a course of antibiotics. This is particularly important if a mesh has been used. With bad infections sometimes a re-operation is required and the mesh may need to be removed.

You should contact your doctor if after the operation you develop any of the following:

- redness around or drainage from the incision(s)
- fever
- bleeding from the incision(s)
- pain that is not relieved by medication or pain that suddenly worsens

Particularly for large hernias where a mesh has been used, a collection of fluid can collect in the space once occupied by the hernia. This is known as a seroma. Small seromas can safely be left alone and many will disappear completely over time. Sometimes these fluid swellings can grow quite large and tense. In this case the collection of fluid may need to be drained off with a needle.

Some patients particularly men can find it difficult to pass urine after a hernia repair. It is always important to tell your surgeon, before coming in to hospital, if you are experiencing any difficulties passing urine. Occasionally a catheter may need to be passed if a patient is unable to pass urine and if that is necessary patients usually will have to stay overnight before the catheter can be removed the next day.

After open procedures some patients might experience some numbness or a slightly odd sensation in the skin around the scar. This happens when a nerve is bruised or damaged during the procedure. In many cases the numbness will

improve over period of time.

A few patients may continue to experience pain at a hernia repair site that does not settle down straightaway. We think that this may occur if a nerve is trapped in the mesh material the or scar. Usually this will improve with time. Sometimes a local anaesthetic and steroid injection will relieve symptoms.

A number of people may develop a recurrence of the hernia. Recurrences are far less common these days with the use of mesh but nevertheless can occur.

RECOVERY

We encourage all patients to stay active following surgery. Walking regularly is the most useful exercise after the operation. Following the operation you should avoid heavy lifting for 4-6 weeks. After about 4 weeks you should be able to increase your exercise activities. Starting with gentle rhythmic exercises such as cycling or cross-training and gradually building up to your normal exercise regimen. Provided there are no wound problems swimming can also be good at this stage.

You should be able to return to work within one or two weeks but if your job involves any strenuous activities you may need to be off work for longer or carry out only light duties.

It is difficult to be specific about driving as this will be dependant on the site and size of the hernia repaired. After repair of a small hernia some patients can usually drive again after one to two weeks but this may be four weeks or more for larger hernias. Your surgeon will give you specific instructions regarding this.