PORTSMOUTH HOSPITALS NHS TRUST

Patient Information Leaflet:

Having an Incisional Hernia Operation

This information leaflet has been created by the Portsmouth specialist laparoscopic surgeons:

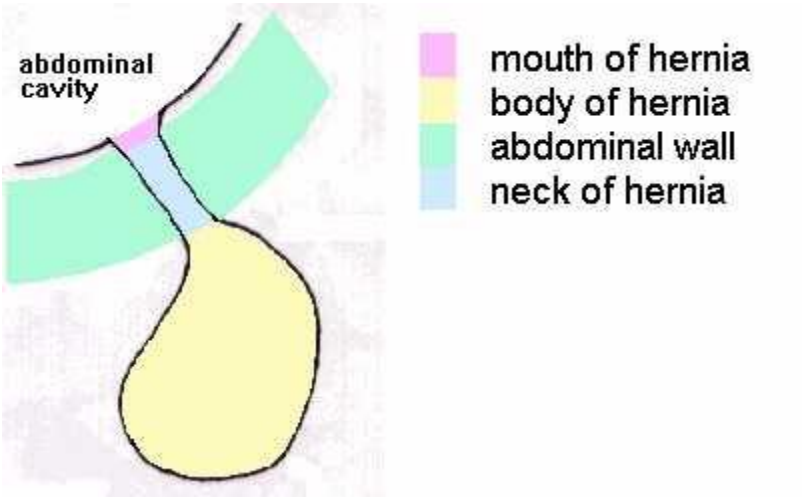
- **Miss A. M. Walters M.D. F.R.C.S**
- **Mr. S.A. Sadek Ph.D. F.R.C.S.**
- **Mr. S.K.C. Toh M.B.B.S F.R.C.S. (Gen Surg)**
- **Mr S.S. Somers B.Sc (Hons). M.D. F.R.C.S.**
- **Mr S.J. Mercer M.A. D.M. F.R.C.S.**
- **Mr N.C. Carter M.Sc. F.R.C.S.**
- **Mr. B.C. Knight M.B.Ch.B. F.R.C.S.**
- **Mr. K.Graetz D.M F.R.C.S.**

Please retain this leaflet to refer to AFTER your operation

PATIENT INFORMATION SHEET

Having an Incisional Hernia Operation

What is a hernia?
A hernia occurs when the layers of muscle of the tummy wall split apart, leaving a gap through which the contents of the abdominal cavity protrude. This may be simply fat, or part of the bowel. This is what the lump or bulge is, at the site of your hernia.



Schematic Drawing of a Hernia

What is an Incisional Hernia?
This is a hernia at the site of a previous operation. Usually it occurs directly beneath the scar at the operation site, but occasionally the lump may go to one side of the scar.
Most incisional hernias occur within the first year after the operation, it is rare for them to appear after a longer period of time.
If you are overweight you may not notice the lump until it is quite large.

Why did I get an incisional hernia?

When you have an operation performed on your abdomen, the surgeon has to cut through the muscle of the tummy wall to get inside the abdominal cavity to carry out the procedure that was required. Once finished on the inside, your surgeon then sewed up the cut they made in the muscle. In some people these stitches give way, allowing the muscle to split apart again. Some people are more likely to have this complication than others: these include:

- Diabetics
- Obese patients
- Smokers
- When the operation was done as an emergency
- When the operation was done for cancer
- People on medication that causes poor wound healing e.g. steroids, azathioprine, chemotherapy
- People who developed a bad wound infection
- People with a bad chest, where frequent coughing puts a strain on the wound

What is an incisional hernia repair?

To repair an incisional hernia, the split in the muscle layer that has produced the gap needs to be repaired by closing the gap shut again, and reinforcing that repair with an artificial permanent patch of material called a mesh.
Studies have shown that just sewing the gap back together without the mesh carries a high chance of the hernia coming back, so most surgeons have abandoned this method in favour of using a permanent patch.

Are all incisional hernias the same?

Yes and no. All incisional hernias share the fact that there is a gap in the muscle of the tummy wall, but they differ in size and site.
They can occur from an incision anywhere on the abdomen, so they can vary from a small hernia following laparoscopic (keyhole) surgery, to a medium sized hernia from an appendix wound, to a large or extremely large hernia from a long vertical scar from the breastbone down to the pelvic bone.

Does the size matter when it comes to having a repair operation?

Yes. The size of the hernia lump may not reflect the size of the gap in the muscle layer; this gap between the muscle is what doctors call the size of the defect. It can sometimes be difficult for us to tell what size the muscle defect is when we examine you in clinic (think of a mushroom which has a stalk (the muscle defect) and a cap (the hernia bulge)).
Studies have shown that the size of the muscle gap is related to the success of an incisional hernia repair

- Less than 5cm diameter is small
- 5-10cm is medium sized

- over 10cm is large

The smaller the muscle defect, the more likely it is that the repair will be successful in the years to come.

My hernia is very large. Can it be operated on?

Very large incisional hernias are usually related to long vertical surgical wounds on the abdomen. If the muscle has spread widely apart, the gap may mean the entire front of the abdomen has no muscle present at all. These hernias are extremely difficult to repair, cannot be done by keyhole surgery, and carry the risk of a long hospital stay, and the possibility of developing life-threatening complications. There is also a high chance that once repaired, the hernia repair may fail, and the hernia comes back again.

As a general rule, if you have an incisional hernia of this type (which requires a long operation called “Abdominal Wall Reconstruction”), your surgeon will only offer you planned surgery if you are an active, healthy person. If you have heart or lung problems, the risk of the major surgery required to fix the hernia may be too great.

What sort of trouble can an incisional hernia cause?

A hernia may cause no pain or discomfort at all, and you may simply notice that there is a lump present. Often the lump disappears when you lie down.

Some people experience discomfort, aching, or an actual pain at the area where the lump appears. This is often worse towards the end of the day, when you have been on your feet a lot. You may notice that this discomfort can be reduced/stopped by lying down and pushing and massaging the lump away (the contents of the hernia go back in to the abdominal cavity).

Do all incisional hernias need to be operated on?

No. Some small hernias, which are not causing discomfort, can be left alone. Sometimes a small hernia will continue to grow, and eventually after months, but usually after several years, it may reach a size where it causes discomfort or is large enough to cause doctors concern that it could develop complications. Should your hernia grow significantly larger, tell your general practitioner who will send you back to see a surgeon.

Can incisional hernias develop complications?

Yes. Fortunately most hernias do not develop complications, but remain simply as a lump, which may be painless, or cause minor discomfort.

The complications are:

- **Irreducible**. This means that the hernia lump never goes away. The hernia may always have been like that from the first time you noticed it. It may not be painful, or only causes mild discomfort occasionally. Other hernias may originally have gone away by themselves when you lay down or pushed on them, but having grown larger, have stopped going away. If

you have a hernia that does not go away, you should have it looked at by a doctor, particularly if the hernia lump becomes painful or you start to be sick in which case you need to be seen by a doctor as an emergency as it may mean that you have developed an obstructed or strangulated hernia.

- **Obstructed**. This means that part of the bowel has become stuck within the hernia, blocking the bowel from passing food and fluid along. This will result in colicky pains in the tummy (like trapped wind, the pains come and go in waves), followed by vomiting. You will also notice that you have stopped passing wind from the back passage, and your hernia lump is hard, often painful, and will not go away. It has become irreducible. <u>If this happens you must seek immediate attention from your General Practitioner or hospital Emergency Department.</u>
- **Strangulated.** This is the most severe complication that a hernia can have. It occurs when there is severe pain at the site of the lump, sometimes followed several hours later by the skin over the lump becoming red, and often a griping pain in the tummy. This may progress to vomiting and a stoppage of all bowel activity (you stop passing wind from the back passage, and your bowels don't work).
  <u>If this happens you must seek immediate medical attention from your General Practitioner or hospital Emergency Department.</u>
  The hernia lump contains abdominal contents: either a fatty sheet of tissue called the omentum, or bowel. When strangulation occurs, it means that so much bowel or omentum has squeezed in to the hernia through the gap in the muscles, that it cuts off its own blood supply and the tissue in the hernia dies. This process can occur in just a few hours, which is why it is called a surgical emergency.
  Fortunately this is a rare complication of a hernia.
- **Skin changes.** This may occur when an incisional hernia has enlarged enough to put pressure on the skin, causing it to become thin and discoloured, and sometimes flaky. Rarely, the skin may develop an ulcer.

<u>Can there be complications of an operation to fix my hernia?</u>

Yes. All operations carry a risk.

There are general risks that are common to all operations:

- **Wound infection**: the skin around the wound may go red and painful, or the wounds may leak pus. Around 1 in 20 patients will experience this complication, usually after they are already at home. You should get your doctor or practice nurse to check your wound if this occurs, as you may need antibiotics. A short course of antibiotics usually clears the infection within days.
- **Bruising**: it is quite normal to experience some bruising where your wound is, often this does not appear until after you have gone home from hospital. Occasionally a very large bruise may form which takes one or

two weeks to go away. The wounds may ooze a little bit of blood or clear fluid for the first 48hrs, requiring a change of wound dressing. This is quite normal.

- **Haematoma**: this means a collection of blood. In hernia operations, this usually occurs just beneath the wound, forming a lump. A large lump may take several weeks to disperse. As it disperses, bruising usually appears. With keyhole surgery of hernias, the haematoma may appear in the area where your hernia lump was, it is important not to mistake this haematoma for a recurrent hernia.
- **Chest infection**: if you develop a cough, or feel short of breath after your operation, you may have developed a chest infection. This is rare if you are fit and healthy. You are at high risk of this if you have a lung disease (chronic bronchitis, emphysema, severe asthma), and moderate risk if you are overweight, or are a smoker.
- **Internal bleeding**: this is rare (occurring in less than 1 in 1000 hernia operations), but may require you to have a blood transfusion, or a second operation in order to stop the bleeding.
- **Allergic reactions** to antibiotics or anaesthetics: this is also rare (occurring in less than 1 in 100 operations). If you have had a previous bad reaction to an anaesthetic or any medication, you MUST inform the surgeon or the anaesthetist before your operation.
- **Blood clots** in the legs: this is also known as deep venous thrombosis (DVT). It carries the risk of the blood clot moving from the leg up to the lungs (pulmonary embolus), which can be a life-threatening condition. A blood clot in the leg may not give any sign or symptom that it is there, or it may cause a pain in the leg (usually in the calf muscle) or swelling of the leg. A fit healthy person has a very small risk of DVT. Your risk is higher if you are overweight, a smoker, in poor general health, or have difficulty walking. If you have had a previous DVT or a strong family history of DVT, you must let us know. To reduce your chance of developing a DVT you will be encouraged to get out of bed as soon as you are sufficiently recovered from the anaesthetic. You may also be given an injection of a medicine called heparin, which is proven to reduce your chance of developing a large pulmonary embolus. While you are on bed rest, you should exercise your calf muscles by moving your feet up and down.
- **Pulmonary embolism**. This is when a blood clot formed in the legs (see preceding point) travels to the lungs. Within the lungs a clot will block the blood supply to parts of the lungs resulting in a feeling of being short of breath. Often there may be no sign of a blood clot in the legs, so if you become breathless after your operation you should see your General Practitioner or attend the Emergency Department.
-

There are risks specific to the patient's general health:

- **If you have heart disease**: some types of hernias require major surgery to repair, which can put a strain on existing heart problems, resulting in a heart attack around the time of surgery. This may result in death, or prolonged ill health. You may have to have a heart scan (echocardiogram), and an anaesthetic review in advance of surgery. You may also require review by a heart specialist (cardiologist).
- **If you have breathing problems**: you may require special tests on your lungs, and an anaesthetic review. Your risk of developing a chest infection (pneumonia) will be markedly increased. People with severe breathing problems may require admission to the Intensive Care Unit for observation, sometimes for support on a breathing machine.
- **If you are on warfarin/dabigatran/rivaroxaban/apixaban**: these are powerful blood thinning drugs and will have to be stopped in advance of your operation. Depending on why you are on it, it may be necessary to keep your blood thinned with heparin prior to your operation; this may need to be done by admitting you to hospital a day or two before your operation date. The heparin needs to be stopped several hours before you go to the operating theatre, so that your blood clots normally at the time of your surgery. It is not possible to operate on hernias without normal blood clotting, as the risk of a major life-threatening haemorrhage is too great. You will remain off the blood thinners for a time after your operation to reduce the risk of bleeding. Clearly there is a risk to you during the time you are off blood thinners. If your symptoms from your hernia are fairly mild, and the hernia is small, the surgeon may advise you that the risk of surgery is too high, and advise you not to have the operation. Having surgery when you are on blood thinning medication always increases the risk that you will develop a haemorrhage at the time of surgery or in the first few days after surgery. You are also likely to get a lot of bruising.
- **If you are on aspirin**: this increases the chances of bruising and bleeding around the time of surgery. We may advise you to stop your aspirin 3 days before your operation, and start it again the day after your operation.
- **If you are on clopidogrel/prasugrel/ticagrelor**: these drugs act similarly to aspirin, but are more powerful. We advise you to stop your Plavix/Efient/Brilinta 10 days before your operation, and restart it 3 days after your operation.
- **If you have diabetes**: mild diabetes controlled by diet or a small number of tablets is often not a problem if you are having hernia surgery. If a combination of tablets, or insulin injections, is required to keep your diabetes under control then you may have a longer stay in hospital, having insulin given by a drip. If you have had diabetes for many years it may have had a bad effect on your heart and kidney function, and problems with your circulation: if this is the case then the risks to your life of having hernia surgery is increased.
- **If you are overweight**: this greatly increases your chances of developing a blood clot in the legs, which may lead to a pulmonary embolism (the blood clot travels to the lungs, a condition which can be fatal). You are

also at increased risk of developing a chest infection (pneumonia) and a wound infection. People who are overweight are also at risk of diabetes and heart disease, which also increases your risks when having surgery (as described above). Being significantly obese (BMI over 30) reduces the chance of your hernia operation being a long term success.

- **If you are a smoker**: you are at increased risk of developing a chest infection and blood clots in the legs after an operation. Smoking also increases the risks of heart disease, so you are at increased risk of developing a heart attack around the time of surgery. It also reduces the chance of your hernia operation being a long term success.

If we feel you are a high-risk patient, we will tell you.

Complications due to the mesh itself

A wide variety of meshes are produced by commercial companies, in a variety of shapes and sizes. All are sterilised and packaged individually. All types of mesh used to repair hernias are made of synthetic material that is not absorbed by the body, but remain permanently in place. This is why they are so successful in repairing hernias. Rarely, however, there can be problems related to the mesh itself:

- **Infection:** all meshes are sterilised and free of germs when they are put in. However, everyone carries germs on their skin, so there is a small risk that one of your skin germs could get on the mesh at the time of surgery and cause an infection. To further safeguard against this, you will receive antibiotics while you are having the operation. Mesh infection is not common, occurring in less than 5% of incisional hernia repairs. However, if it occurs, it is a major complication because once a mesh is infected, antibiotics may not get rid of the infection, and you may require to have the mesh removed by further surgery. Having the mesh removed may result in the hernia coming back. If the infection occurs more than a month after your operation, it can be difficult to ensure that the entire mesh is removed, as it becomes closely amalgamated with your own tissues. This may mean several operations over a period of weeks/months/years are required to remove the entire mesh
- **Bowel obstruction/bowel fistula:** this rare complication can only occur if the bowel is in contact with the mesh. Even where bowel is in contact with mesh, it is rare for this to cause a problem. Bowel can be in contact with the mesh in both keyhole (laparoscopic) and open hernia repairs.
  This complication usually requires major surgery and a long hospital stay in order to deal with it. The mesh may have to be removed, in addition to dealing with the bowel problem, which may rarely involve a stoma having to be created (bowel being brought to the skin surface and bowel motions going in to a bag).

Will I have a mesh hernia repair?

All incisional hernias are now repaired with mesh. The mesh is made from synthetic material which is used to patch the muscle gap which is the hernia. The mesh is permanent, but is usually placed deeply, so that you are unaware of its presence.

The use of mesh has reduced the number of hernias that come back (called "recurrence" of a hernia).

So hernias can come back?

Yes. The risk of a hernia coming back is related to many factors:

- The size of hernia (larger ones often have large gaps in the muscle which are more difficult to patch successfully)
- The hernia is recurrent (it has been repaired before, but has come back again)
- If you are diabetic with HbA1C regularly over 40
- If you are obese (BMI over 30)
- If you are a smoker
- If you have an emergency operation
- If you have a heavy physical job or routinely undertake extremely strenuous exercise
- If you are on medication which impairs healing e.g. steroids, immunosuppressive medication

Will my hernia be repaired by keyhole surgery?

This depends on the size of the hernia, and whether your surgeon is trained in keyhole (laparoscopic) surgery.

Keyhole surgery is simply a method of repairing a hernia through several small cuts on the tummy, rather than a single larger one. Both keyhole and open surgery aim to close the gap in the muscles that is the hernia, and reinforce the area with a mesh.

Your surgeon will discuss with you which type of surgery they are planning to perform.

Keyhole surgery may not be an option for some hernias.

Your surgeon will be happy to discuss the option of keyhole surgery with you, and advise you as to whether your particular hernia is suitable for that method of repair.

Keyhole surgery should not be regarded as minor surgery: the term "keyhole" reflects the type of surgical technique, not the size of the operation. All operations on incisional hernias are major surgery, whether by keyhole or open surgery.

You must also understand that although your surgeon may state that you will have your operation by keyhole surgery, in the course of carrying out your operation it may be decided that it is necessary to change the operation from keyhole to open surgery, for your safety. This may be for a number of reasons

including: bowel is trapped in the hernia, bleeding, poor vision with the keyhole camera, a lot of scar tissue inside, or suspected bowel damage.

Are there any disadvantages specific to keyhole surgery?

Yes. Keyhole surgery involves placing hollow metal tubes the width of a pencil, or larger, through the muscle of the abdominal wall. The muscle of the abdominal wall protects the contents of your abdomen (bowel, bladder etc) from harm, and on rare occasions these metal tubes may unintentionally puncture bowel or a blood vessel. This damage is usually identified at the time it happens, and is repaired, although it may prevent your intended operation from being completed. Less commonly, damage is not seen at the time of your operation, but you become unwell in the hours or days following your surgery, which alerts the doctors looking after you to the fact there is a problem. Under these circumstances you may require major surgery to correct the problem.

Risks Specific to Incisional Hernia Repair Surgery:

- **Seroma**: this is a collection of fluid that may occur after surgery in the area where the hernia lump used to be. It will usually disperse by itself after a week or two. The larger the incisional hernia, the more likely this is to occur. Your surgeon may supply you with a surgical support (like a corset) to wear after your operation to try to prevent this happening. Occasionally a seroma may persist for weeks afterwards your surgeon may then choose to drain it in the outpatient clinic. Rarely the seroma forms a pocket around itself, and it becomes permanent and requires an operation to remove it. Seromas are seldom painful, but they can become infected. Seromas are more common after keyhole surgery than open surgery, because in open surgery excess skin is removed and a drain may be placed.
- **Recurrence**: incisional hernia repairs have the highest recurrence rate of all types of hernia repairs. The rate of recurrence is usually in direct proportion to their size i.e small hernias have a lower recurrence rate than large hernias. Very large hernias have a recurrence rate of 10-30%, they are often not suitable for keyhole surgery repair, and are a major surgical operation.
- **Bowel damage**: following abdominal surgery, some people develop scar tissue called adhesions. Adhesions do not show up on any scan test, and it cannot be predicted who will have them and who will not. It causes the bowel to become matted together and stuck inside the hernia, or around the edges of the hernia. In order to put the mesh patch in, your surgeon needs to get all the bowel away from the edges of the hernia, and if you have adhesions the bowel can be damaged. This damage is usually identified and repaired at the time it occurs, although you may then not be able to have your hernia repaired at the

same time. If the damage is not identified at the time, you will become unwell in the first 72hrs after your operation, and will require emergency major surgery to correct the problem. This is a life-threatening complication.

Will my old wound and tummy look any better if I have my incisional hernia operated on?

Some patients have no symptoms from their hernia, but are unhappy with the way it looks. This is particularly so if the hernia is of a size that the bulge can be seen even through clothing.

It is important to be realistic about what surgery can offer you.

Keyhole surgery is done through several small (1-2cm) cuts, away from your original scar. This means that your old scar will remain. If you have a large hernia which has stretched the skin, that loose skin will remain behind if you have keyhole surgery, and sometimes the space that the hernia occupied becomes filled with fluid (called a seroma) after the surgery. This fluid may remain for a few weeks, and while it is there your tummy may look identical to the way it looked before you had the operation. If your surgeon thinks you are likely to get a seroma they may advise you to have keyhole surgery but also to have your old scar removed as well.

If you have open surgery, the surgeon will usually go back through your old wound, and will remove the old scar if it is stretched. Any excess skin that is left after the hernia is repaired will also be removed. You may still get a seroma, but it will usually be smaller than those seen after keyhole surgery.

Some patients, who have an incisional hernia, also have weak muscles, so that when the incisional hernia is repaired they still have a rather bulgy tummy.

From a surgeon's point of view, we are repairing your hernia in order to prevent the complications associated with incisional hernias: we do not regard it as a cosmetic procedure. We are unlikely to be able to recreate the tummy appearance you had before you ever had the surgery that gave you an incisional hernia in the first place.

How soon can I go home after my operation?

To be able to go home you must be able to drink, be able to eat light meals, and be able to walk about comfortably. You must also be able to pass urine normally.

Only the smallest incisional hernias can be done as a day case, as most people require strong painkillers for at least the first 24hrs after surgery, and sometimes several days. Your surgeon will have given you an estimate of how long you will be in hospital at your clinic visit.

Most people will need to take tablet-type painkillers for their first week or two at home, so we will send you home with a supply.

Everyone is different when it comes to experiencing pain after an operation, so we can only give you an estimate about how you will feel. As a rule of thumb, the larger the hernia the larger the mesh needed to repair it, so there is more post-operative pain the bigger your hernia is.

Will I need to have somebody to look after me at home?

Many people feel tired and woozy after a general anaesthetic, so someone able to look after you by making hot drinks, light meals etc is helpful. They can also phone the hospital on your behalf if you have an unexpected problem.
It is helpful to have someone able to do shopping or run errands for you during your first week at home, until you are fully mobile.

What will I be able to do when I go home?

It is normal to feel tired and a bit sore for several days to several weeks, depending on how large your hernia was. This is quite normal after incisional hernia surgery. You should rest, and eat only light meals for the first day or two, and avoid any alcohol while taking painkillers stronger than paracetamol.
You may find your bowels tend to be constipated, this is as a result of missing normal meals around the time of your surgery, and is also a side effect of many painkillers. It should settle by itself, but if not, you can use a gentle laxative that you can buy from any chemist.
You may not feel like leaving the house for the first couple of days, but make sure you walk about within the house or around the garden every couple of hours during waking hours to keep the blood circulating in the legs and reduce the chance of a blood clot forming in the legs. If you feel quite sore you should take your painkillers regularly to enable you to move about. If you are still feeling sore and requiring painkillers after you have finished the supply provided by the hospital, contact your general practitioner for a further supply.
Younger people will usually return to normal more rapidly than an older person. The larger the hernia that we repaired was, the longer the convalescent period.

What should I do with my wound(s)?

The nurses on the ward will explain this to you in detail before you leave the hospital.
Some surgeons use skin stitches which go away by themselves, others use stitches or staples which need to be removed. Your wound will be covered by a light dressing. For the first couple of days it is not unusual to have slight blood leakage on to the dressing. We can provide dressings which are showerproof.
You may have a bath 7 days after your surgery, provided your wound is clean and dry, and you have no drains present (plastic tubes coming from the wound to assist drainage).
It is normal for the wound to feel hard and tender for several weeks, it is also quite normal for you to feel a lump under the wound, as this is the healing ridge of tissue. The actual scar itself will appear red, and often remains red for many months.
If the skin around the wound develops redness extending more than 1 inch (2cm) from the scar, and this does not go away with 24hrs of you noticing it, you should contact your practice nurse, as you may be developing a wound infection.

When will I be able to go back to work?
This depends on your type of work, and the size of hernia you have had operated on.
A desk job can usually be returned to after 2-4 weeks.
A heavy manual job will require longer off work, usually around 10-12 weeks.
Some employers allow workers to return to work but on light duties to begin with.
Large incisional hernias may require 12 weeks of no heavy lifting/sport.

When can I start to drive again?
You must not drive within 24 hours of a general anaesthetic, or when using strong painkillers. Otherwise, once you can comfortably use all the controls in the car, it is safe to drive. This means being able to perform an emergency stop, and being able to turn round in your seat to safely reverse the car. Most people find they need a week or more to recover enough to drive safely.
It is always best to check with your insurance company to see if they have any specific rules related to the type of operation you have had done. This is particularly important for professional drivers.

When can I start to exercise again?
Doctors opinions vary about this, because of a lack of any detailed study in to this question. All are agreed that walking is good. Your surgeon will be able to give you his/her opinion related to your specific type of hernia and the type of sport you have in mind.

Will I be given a hospital review appointment after my operation?
This varies from surgeon to surgeon. Many surgeons do routinely see their patients after a large incisional hernia repair.

Is it possible to be too unfit for hernia surgery?
Yes. This is usually because of heart problems or lung problems, but a variety of health conditions can make somebody have such a high risk of dying with surgery, that the surgeons will advise them not to have surgery. We may also decide to have an anaesthetic doctor examine someone to help us assess whether they are fit for surgery or not.
If you are advised by a consultant surgeon not to have surgery on your hernia, but you still wish to have the operation, you should ask for a second opinion from another consultant surgeon, and we will arrange this for you, or we will ask your General Practitioner to arrange it for you.

Is there anything I can do to improve my health before having surgery?

Yes there is:

- **Stop smoking** at least 6 weeks before your surgery (smoking impairs healing and increases the risk of a chest infection after an anaesthetic).
- **Get your weight under control**. Your BMI (body mass index) should be 20-25. Many surgeons will not operate on people with a BMI above 35 because of the high failure rate of the operation. Your General Practitioner may have a nurse in the practice that can help you with a weight reducing diet, or you could join Weightwatchers/Slimming World etc
- **Good diabetic control**. Ensure your HbA1c is as near 40 as possible. Many surgeons will not operate on poorly controlled diabetics because of the high failure rate of the operation.
- **Normal blood pressure**. If you have high blood pressure, that will need to be corrected before your operation

.

20th January 2007
Revised 1st March 2017