

PORTSMOUTH HOSPITALS NHS TRUST

Patient Information Leaflet:

Having a Hernia Operation

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Please retain this leaflet to refer to AFTER your operation.

Further information is available at:

www.nhs.uk

www.rcseng.ac.uk/patients/recovering-from-surgery/groin-hernia-repair

www.mayoclinic.org

PATIENT INFORMATION SHEET

Having a Hernia Operation

PATIENT NAME

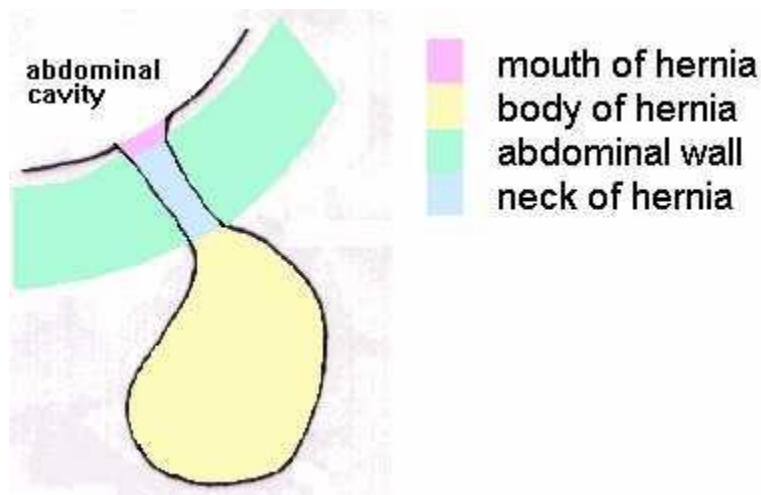
HERNIA TYPE:

INGUINAL
FEMORAL
UMBILICAL
EPIGASTRIC
SPIGELIAN
LUMBAR

Planned operation: keyhole/open mesh/no mesh

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 is what the lump or bulge is, at the site of your hernia (see diagram).



What is a hernia repair?

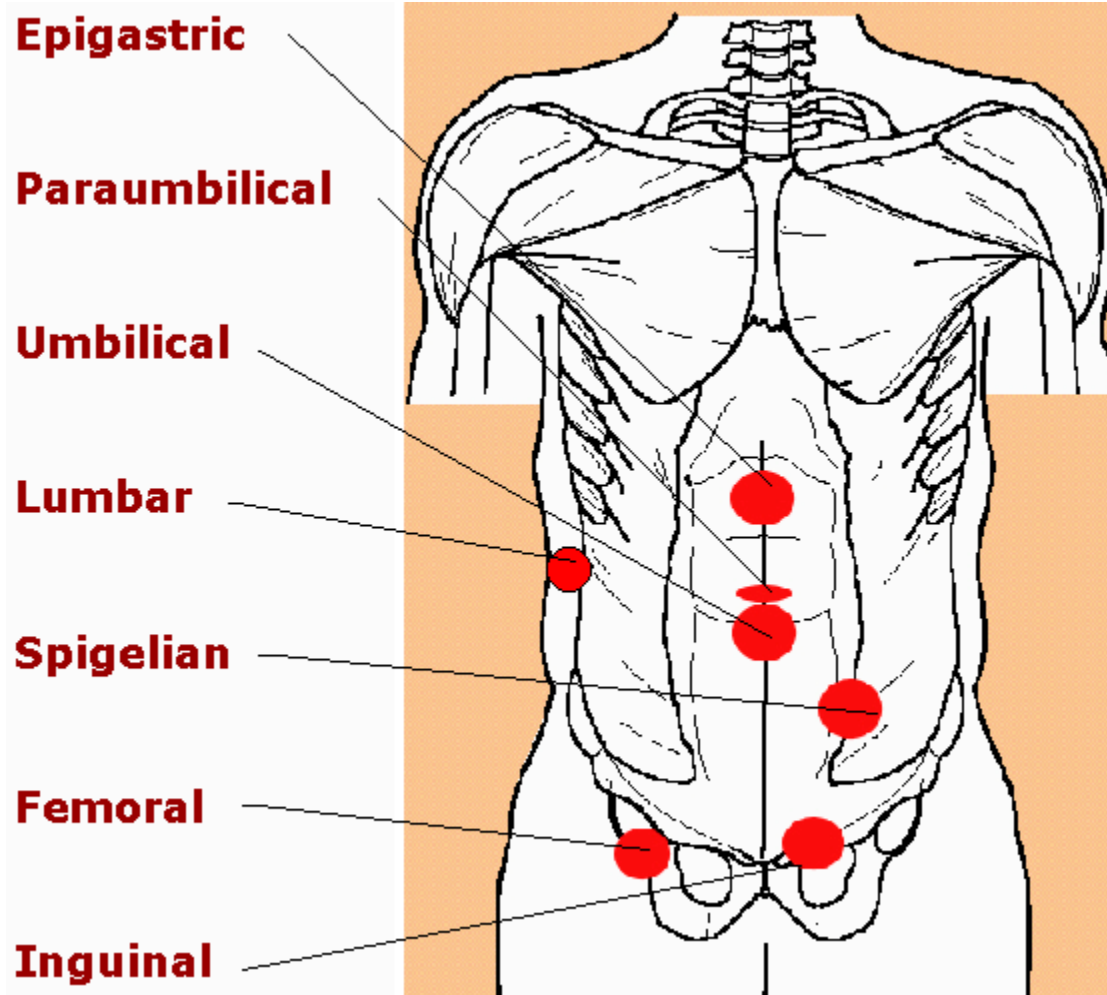
To repair a hernia, the split in the muscle layer that has produced the gap needs to be repaired by closing the gap shut with either strong permanent internal stitches, or by patching with an artificial permanent material (usually a type of nylon), often called a mesh.

What sort of trouble can hernias 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 where they belong).

Do all 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. If you have a small hernia which has grown significantly larger, tell your general practitioner who will send you back to see a surgeon who will reassess it.



Anatomical Diagram of Hernia Sites

Are there different types of hernias?

Yes. Hernias occur in several different areas of the body. These include:

- **Inguinal hernias** (in the groin). These are the most common type of hernia. They are more common in men than women.
- **Femoral hernias** (in the groin). These are 10 times less common than inguinal hernias.
- **Umbilical hernias** (at the tummy button). These are also very common
- **Paraumbilical hernias** (at the tummy button, but usually off to one side). These are also very common.
- **Epigastric/ventral hernias** (these occur anywhere in a line between the bottom of the breast bone and the tummy button). Quite common, and usually occur in younger people.
- **Spigelian hernias** (at the side of the tummy). These are very rare.
- **Lumbar hernias** (in the flank). These are even rarer.

Can hernias develop complications?

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

Possible complications include:

- **Irreducible.** This means that the hernia lump never goes away. The hernia may always have been like that from the very start when it is not painful, or only causes mild discomfort occasionally. (Common with umbilical/paraumbilical/ventral/epigastric hernias) Other hernias may originally have gone away by themselves when you lay down or pushed on them, but by having grown larger, have stopped going away. This is commonest with femoral and inguinal types of hernias. If you have a hernia which 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. If this happens you must seek immediate attention from your general practitioner or hospital Emergency Department.
- **Strangulated.** This is the most severe complication that a hernia can have. 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. A hernia is strangulated 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). If this happens you must seek immediate medical attention from your general practitioner or hospital Emergency Department. Fortunately this is a rare complication of a hernia.
- **Skin changes.** The skin overlying a longstanding hernia which has become large, can become stretched and thinned. At it's worst, an ulcer can develop.

Can there be complications of an operation to fix my hernia?

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. Men having a groin hernia repaired may find that the skin of their penis and scrotum goes black due to this bruising; this may look alarming, but will go away within a week or two.
- **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 groin 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. If you normally take any blood thinning medicines it is important to let the surgeon and anaesthetist know this before your operation.
- **Allergic reactions** to antibiotics or anaesthetics: this is also rare (occurring in less than 1 in 10,000 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. If you have a shellfish allergy, this may mean you are allergic to iodine, which is used in the operating theatre, so please alert us to this. It is also important that you alert us if you have a latex allergy.
- **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, have difficulty walking, or have had a previous DVT. 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. If you are in bed resting, you should exercise your calf muscles by moving your feet up and down. . If you fall in to a category of having a high risk of a DVT, you will be given a heparin injection before your operation and will have to continue to inject yourself with heparin at home for a further 2 weeks.

- **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:** Having an operation 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 all blood thinning medications and will have to be stopped in advance of your operation. Depending on why you are on the medication, it may be necessary to keep your blood thinned with heparin prior to your operation; this may need to be done in the hospital. If so you will be admitted one or more days before your planned operation. The heparin will 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 also need to remain off blood thinners for a time after your operation to allow healing to begin. Clearly you have been put on these medications in order to prevent your blood clotting normally, and there is a risk of clotting during the time you are off them. 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. Some surgeons will not ask you to stop aspirin before surgery.
- **If you are on clopidrogel/prasugrel:** These drugs act similarly to aspirin, but are more powerful. You will need to stop this medication 7 days before your operation, and restart it a day or two after your operation. Failure to stop this medication puts you at risk of major bleeding and bruising.
- **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 increased risk of having diabetes and heart disease, which also increases your risks when having surgery (as described above). You may be weighed in the clinic; ask for your BMI if you don't already know it.
- **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. Smoking also increases the risk of wound infection and of your hernia repair failing and the hernia coming back.

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

Complications specific to each type of hernia site are described later.

Complications due to the mesh itself

All types of mesh used to repair hernias are made of a synthetic material (usually a type of nylon) that is not absorbed by the body, but remains permanently in place, acting as a scaffolding for natural scar tissue produced by the body. This is why meshes 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. Your skin will be cleaned with a strong antiseptic in the operating theatre, and you will receive antibiotics during the anaesthetic, while you are having the operation. Mesh infection is a rare complication for hernia repairs performed as a planned operation, less than 0.5% of patients having a hernia repaired will get a mesh infection. 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.
- **Bowel obstruction/bowel fistula:** This is an extremely rare complication. It occurs if the bowel in contact with the mesh becomes inflamed and scarred. Major surgery is required to deal with this problem. The mesh may have to be removed, in addition to dealing with the bowel problem. Occasionally, a stoma (a piece of bowel brought to the surface of the abdomen) is required to allow healing to occur.

Will I have a mesh hernia repair?

The majority of hernias are now repaired with mesh. The mesh is made from synthetic material (usually a type of nylon) which is used to patch the muscle gap which is the hernia. The mesh is permanent, but is usually placed deeply within the layers of muscle, so that you are unaware of its presence.

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

So can hernias come back?

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

- The type of hernia you have
- The size of hernia (larger ones often have large gaps in the muscle which are more difficult to patch successfully)
- If you are overweight, particularly if you are carrying a lot of weight on your tummy (it is important not to gain much weight after your operation as it may cause your repair to fail)
- The hernia is recurrent (it has been repaired before, but has come back again)
- If you are diabetic (you heal less well)
- 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
- If you have a chronic cough

Will my hernia be repaired by keyhole surgery?

This depends on the type of hernia you have, its size, 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 or patch the gap in the muscles that is the hernia.

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.
- Keyhole surgery has to be performed under a general anaesthetic.
- Keyhole surgery always involves use of a mesh.

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.

The National Institute for Clinical Excellence (NICE) has assessed the benefits of keyhole versus open hernia repair only for inguinal hernias. They concluded that inguinal hernias which have come back after a previous repair (recurrent inguinal hernias), and bilateral inguinal hernias (having a right and left sided hernia at the same time) should be mesh repaired laparoscopically. They have also concluded that patients with a single inguinal hernia should be offered the choice of open or laparoscopic surgical mesh repair.

Are there any advantages specific to keyhole surgery?

Keyhole surgery of inguinal and femoral hernias causes less pain than open surgery in the first few days after surgery. It is also associated with fewer wound infections. There is also evidence to support that patients have an earlier return to normal activities and less prolonged groin pain after keyhole surgery.

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 (blood vessels, bowel, bladder etc) from harm, and on rare occasions these metal tubes may unintentionally puncture something. This is a rare complication. This damage is usually identified at the time it happens, and is repaired, although it may prevent your intended operation from being completed. You may require a blood transfusion. 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; this may include formation of a stoma (bowel being brought on to the skin surface, with bowel motions going in to a bag). An injury to the bladder will require a urinary catheter (a tube in to the bladder) for 10 days to allow it to heal.

Types of hernias:

1. **Inguinal hernia:** This type of hernia occurs in the groin, immediately above the crease at the top of the leg. It is much more common in men than women. If large, it may extend down in to the scrotum, towards the testicle. It is virtually always repaired with a mesh. You may have a hernia on the right and left side at the same time: if so, most surgeons would choose to repair both hernias at the same time, using keyhole surgery. If you have a single hernia it may be repaired by open surgery or by keyhole surgery. If you have a single hernia there is a 10-30% chance you will develop a hernia on the opposite side at some time in your life. If you are fit and healthy, with someone at home who can look after you, you will go home on the day of your operation.
It is possible to repair small inguinal hernias in slim people under local anaesthetic, by the open operation (keyhole surgery requires a general anaesthetic).

Risks Specific to Inguinal Hernia Repair

- **Bruising and swelling** of the scrotum (in men). Most men experience a minor degree of this, but in around 10-15% of men the skin of the scrotum becomes very bruised, which may take 2-3 weeks to go away. Significant swelling may require you to wear supportive underpants, and may be uncomfortable enough to require extra time off work.
- **Numbness** in the groin and/or upper scrotum. It is common to experience reduced sensation (a numb type feeling similar to the way your cheek feels after a local anaesthetic injection at the dentists) in those areas for several weeks/months after surgery. This is not painful, although some patients find it an unpleasant sensation, and it usually gets better with time. This is more common after open surgery, and rarer after keyhole surgery.
- **Chronic pain.** Several nerves that supply the skin of the groin, thigh and scrotum/labia travel in close proximity to the hernia. Unfortunately around 10% of patients get long-term groin pain due to nerve irritation, which can last for months or years after the operation (this is not to be confused with ordinary post-operative pain which is experienced by all patients in the first few days/weeks after surgery, which gradually gets better). If you are unfortunate enough to get chronic groin pain after your hernia repair, your general practitioner can refer you to the Pain Clinic where specialist doctors can help you sort it out.
- **Damage to the testicle.** This is a very rare complication. The blood supply to the testicle is very close to the hernia, if the blood supply is damaged the testicle will shrink over the weeks/months after the operation, and it will no longer function. This complication is usually only encountered in an operation for recurrent inguinal hernia.
- **Groin seroma.** This occurs mainly after keyhole surgery. Several days after your operation a lump appears where your hernia lump used to

be. This is NOT the hernia having returned, but a ball of fluid which has moved in to the space where the hernia used to be. It will usually disperse by itself after a few weeks, but may last several months. If you develop this, you should ignore it as it will go away by itself.

- **Mesh sensation.** Some patients describe feeling a slight stiffness where their hernia used to be. This is likely to be the scar tissue on the mesh, giving a good strong repair. Patients who describe this are not usually troubled by it.

2. **Femoral hernia:** This is another type of groin hernia, occurring immediately below the groin crease at the top of the leg. This type is more common in women than men. It may be repaired by open surgery or keyhole surgery. If you are fit and healthy, with good home support, you can have your operation as a day case. In open surgery your hernia may be repaired with a mesh, or by stitches; if done by keyhole surgery a mesh will be used.

3. **Umbilical hernia or paraumbilical hernia:** This type of hernia occurs at, or beside, the tummy button. The tummy button is the scar of the umbilical cord which kept you alive and growing whilst a baby in your mother's womb; it is a site of weakness in the muscles of the tummy wall. The lump can be above, below, or to either side of the tummy button. It can also push the tummy button out, or make it disappear entirely. Most of these hernias are small (less than 2cm/1 inch across), and many people are unaware of them, until it is pointed out to them. It is perfectly safe to have a small umbilical hernia. These hernias are more common if you are overweight, and you are advised to lose weight prior to any surgery. They are also common in people who have a chronic cough. After getting your weight down to normal, you may find any discomfort from your hernia has stopped, and surgery may no longer be necessary.

Uncommonly, these hernias can enlarge to plum or even grapefruit size; then the skin may become very thin, or the hernia may become strangulated. In these circumstances you may be advised to have an operation to repair the hernia, if your general health allows it.

Small umbilical hernias can be repaired without a mesh, usually by open surgery. Larger umbilical hernias usually require a mesh, and your surgeon may advise repair by keyhole surgery. Very large hernias with abnormally thinned skin over them may require removal of the abnormal skin, which will result in loss of your tummy button. Your surgeon will tell you in advance if he/she intends to remove your tummy button.

4. **Epigastric hernia or ventral hernia:** This type of hernia occurs anywhere in a line between the bottom of the breastbone and the tummy button. This

line (it's anatomical name is linea alba) is where the two large muscles (the "six-pack" muscles) of the tummy wall join in the middle. These hernias are a weak spot in that join line. Despite their small size, these hernias can often be quite tender.

Small hernias here can be repaired without a mesh.

5. **Spigelian hernias and lumbar hernias:** Both of these types of hernias are rare, and occur towards the side of the tummy (see diagram on page 2). Your surgeon may decide to repair these types of hernias by open surgery (with or without a mesh) or by keyhole surgery (with a mesh).

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.

May I be turned down for surgery because I am overweight?

Yes. Being overweight (BMI 25-30) is not sufficient to cause surgeons concern, but above that puts a strain on the tissues of the abdominal wall, and makes a hernia repair less likely to be a long term success. When a hernia repair fails, it damages more tissue, and results in a hernia which is often larger than the first hernia, and more difficult to repair because of scar tissue.

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

If you are a smoker you should stop as far in advance (at least 6 weeks) of your surgery as possible (smoking increases the risk of a chest infection after an anaesthetic).

If you are overweight, you should try and lose weight, to get down to your target weight for your height. Your General Practitioner may have a nurse in the practice that can help you with a weight reducing diet, or you could join a slimming club.

If you are diabetic you need to keep your blood sugar levels in the correct range. If you have high blood pressure that needs to be well controlled before you can have surgery.

Will I have to be shaved for surgery?

If your tummy is quite hairy, many surgeons will shave part of it to allow the dressings put on your wounds after the operation to come off with minimal discomfort.

If you have a lot of hair on your thigh you will notice an area has been shaved off. This is to allow the use of electrical cautery during your surgery; this seals off little blood vessels.

Any shaving required is done once you are asleep in the operating theatre.

AFTER YOUR HERNIA REPAIR

How soon can I go home after my operation?

Most hernias in fit people can be operated on and you go home the same day. To be able to go home you must be able to drink, eat light meals, and walk about comfortably. Infrequently a patient booked in for day surgery has to be kept in overnight, because they cannot achieve all of these.

You must also be able to pass urine normally. Your surgeon will have given you an estimate of how long you will be in hospital at your clinic visit.

Will I have pain after my operation?

Most people need to take painkillers after their operation. These will be supplied by the hospital for you to take at home. You should take the painkillers as directed on the packet to make you feel comfortable enough to be able to move around the house. 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. If you feel you still need to take painkillers after the hospital supply has finished you will need to contact your general practitioner.

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

After day case surgery, you should have a responsible adult able to stay with you for 24hrs. 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 telephone the hospital on your behalf if you have an unexpected problem.

After the first 24hrs, it is helpful to have someone able to do shopping or run errands for you, 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 after 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. Younger people will usually return to normal more rapidly than an older person.

What should I do with my wound(s)?

Most surgeons use skin stitches which dissolve by themselves, and 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. The dressings are waterproof and you may shower with the dressings on. bath 7 days after your surgery, If your wound is clean and dry after 4 days you may have a shower with the dressings off (7 days for a bath).

How will I know if my wounds are healing properly?

It is normal for a 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 wound 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. You should also let the practice nurse see your wound if it is still leaking fluid after 4 days.

Most wounds heal without problems so we do not routinely ask you to visit your GP or practice nurse. Extra dressings can be purchased at most chemists if you feel you need them.

When will I be able to go back to work?

This depends on your type of work, and the type of hernia you have had operated on. A desk job can usually be returned to after a week or two. A heavy manual job will require longer off work, usually around two to four weeks. You will see your surgeon before your operation and should discuss a sick note with them, if you need one.

When can I start to drive again?

You must not drive within 24 hours of a general anaesthetic. It is also recommended that you do not drive while on strong painkillers, as they may make you sleepy. 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 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. 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?

We do not routinely see patients after a hernia repair since most patients make a straightforward recovery. If you have problems your general practitioner cannot solve they will refer you back to see your surgeon.

Symptoms requiring you to seek medical attention:

Nausea/vomiting

Anaesthetics and painkillers can make you feel sick. Missing food for two or three days after your operation is not a problem (unless you are diabetic) but you must be able to drink at least a litre of fluid a day without being sick. If you cannot do this you must return to the hospital. If you are diabetic and cannot eat you must return to the hospital

Inability to pass urine

If you cannot pass urine or feel you have to keep passing urine, but are passing only small amounts each time this usually means that your bladder has overfilled and cannot empty. You will need to return to the hospital and may need a tube put in to the bladder to empty it out.

A lot of pain

If you are having sufficient pain to stop you moving about e.g. to the toilet despite taking the painkillers as directed by the hospital you should contact the hospital if it is within 72hrs of your operation, otherwise contact your general practitioner.

Wound infection

If your wound develops redness spreading out from the scar, or weeps fluid requiring more than one dressing change a day, or is still weeping after four days you should see your practice nurse.

Swollen leg

Swelling of the leg below the knee, particularly if it is only on one leg, may indicate that you have developed a blood clot in the leg (deep venous thrombosis). This usually takes a few days or weeks to show up after your

operation. You need to see your GP or return to the hospital immediately if you notice this.

Shortness of breath

If you have become short of breath when you normally would not be, within the first 3 months after your operation, you should see your general practitioner or return to the hospital to be checked out for a pulmonary embolus (blood clot to the lung (see page 7) or a chest infection).

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