

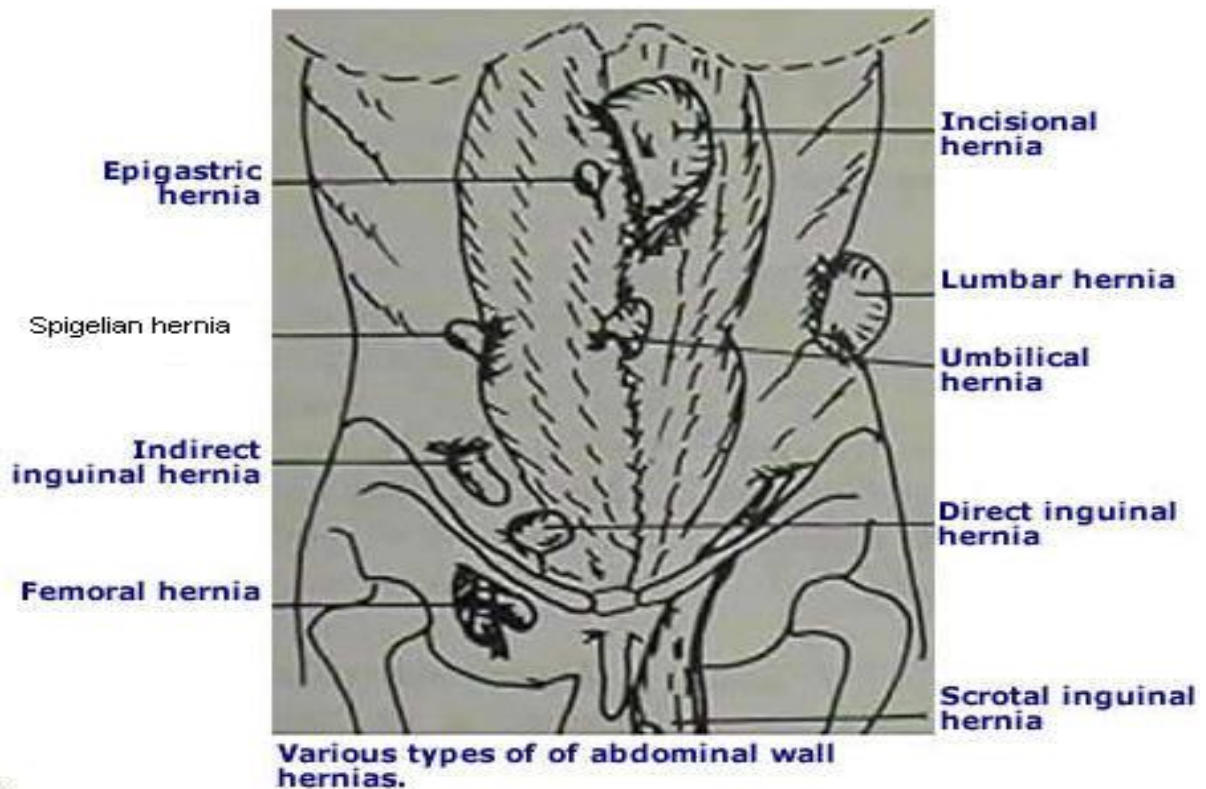
Groin Hernia

1. What is a hernia?

A hernia is an abnormal protrusion of intra-abdominal tissue through a defect in the abdominal wall. Is usually caused by a weakness in the muscles of the abdomen. In both men and women, hernias most commonly occur in the inguinal region [75-80% of all hernias], followed by hernias after previous surgery [incisional hernias, 8-10%] and umbilical hernias [3-8%]. Approximately 5% of men will develop an inguinal hernia in their lifetime. A hernia does not get better over time, nor will it go away by itself.

2. What is the cause of hernia development?

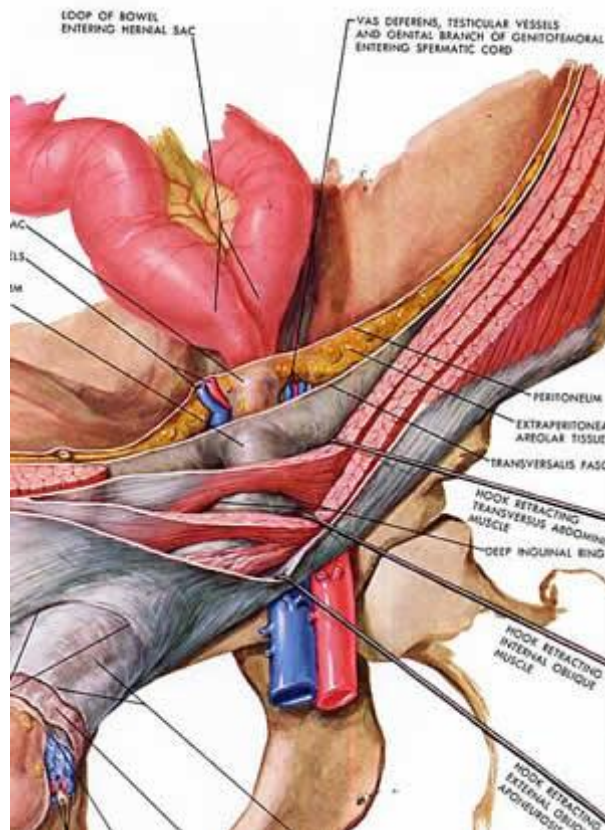
Hernias occur because of a combination of factors.



- Congenital defects of the abdominal wall.
- Loss of tissue strength and elasticity, usually due to aging / smoking.
- Trauma, especially after previous abdominal surgery.
- Increased pressure within the abdomen [stomach] caused by: heavy lifting, pregnancy, constipation, obesity, difficulty in passing water due to prostatic hypertrophy, coughing, asthma and lung disease.

3. What are the symptoms of a groin hernia?

You may have felt pain in the groin area or may have noticed a lump appearing from time to time, especially when you strain. The lump is due to a small part of your abdominal contents coming out through the weak area in the groin. It may be tender, may feel like bowel and is usually reducible with gentle pressure. The lump usually increases in size over the years and this is also related to physical activity.

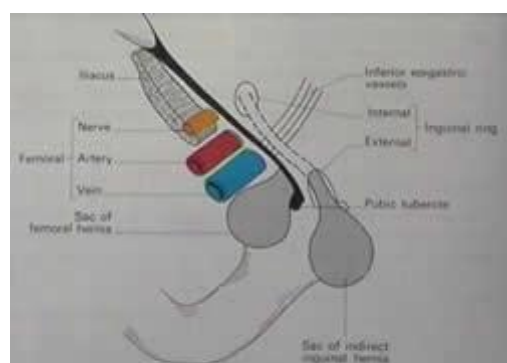


The risk of serious complications like intestinal obstruction and strangulation [bowel stuck to the hernia] is about 5-10%. Severe, continuous pain, redness, and tenderness are signs that the hernia may be entrapped or strangulated. These symptoms are cause for concern and immediate contact of your GP or surgeon.

4. Is there only one type of groin hernia?

There are two types of groin hernias, femoral [appearing low, at the crease] and inguinal [higher, may reach the scrotum], which are subdivided in direct and indirect inguinal hernias.

- Indirect inguinal hernia. 10 times more common in men than women, 5 times more common than direct, occurring, on average, on the 5th decade of life [but may occur



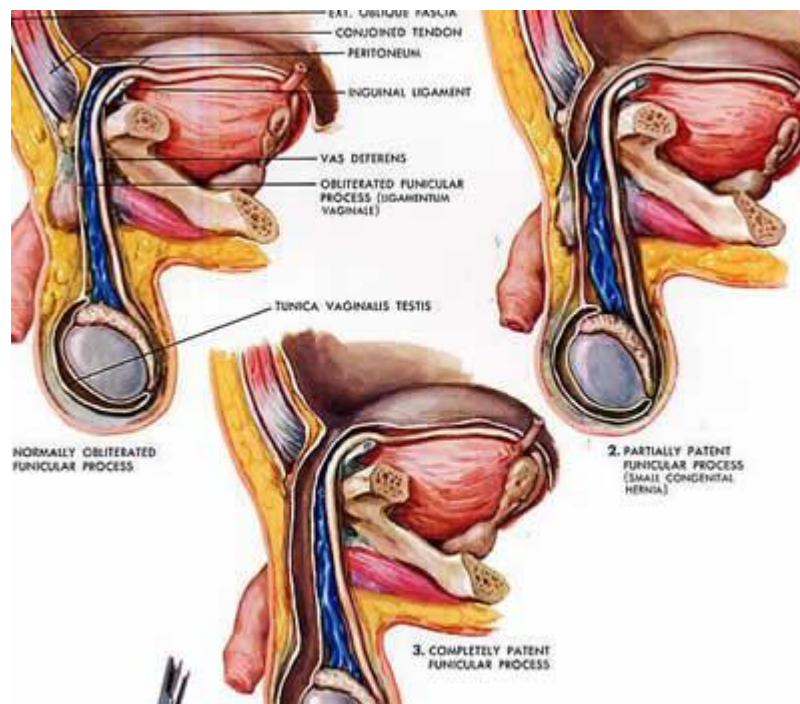
The two types of groin hernias appearing high & low

from infancy to old age], having a medium risk of serious complications.

- Direct inguinal hernia. Is related to age and physical activity, appears at an older age and is much less often associated with serious complications.
- Femoral hernia. Appears on the side of the femoral vein. Is much more common in women [although inguinal hernias are more common than femoral hernias in women] and the risk of serious complications is high [30-40%]. Therefore, surgery is always indicated.

5. What are the treatment options?

As a general rule, groin hernias should be operated upon, in order to prevent the development of serious complications.



For elderly people with severe underlying medical conditions or a direct inguinal hernia, it may be decided that surgical repair may not be needed. Avoidance of anything that increases the intra-abdominal pressure [coughing, lifting objects, constipation etc.] usually suffices.

There are a variety of procedures of repairing a groin hernia described. All have some advantages and disadvantages, and this is the reason why all of them can be employed. In general terms, there are 3 types of procedures:

- Procedures that use your own tissues to reinforce the wall. Rarely used today due to increased pain and recurrence. Indicated when mesh is contra indicated.
- Procedures that use a prosthetic mesh [Lichtenstein]. Most common repair to be performed.

- Laparoscopic repairs [They cause almost no discomfort with good results]. Laparoscopic repairs are more expensive and not all medical aids pay for the procedure. Not all patients are suitable for the procedure. Ideal for recurrent hernias after previous open repair, bilateral hernias and in very active people.

6. What are the results of surgical repair?

- Surgery is successful in more than 99% of the cases. The only significant risk is wound infection. The more significant late risk is pain from nerve entrapment [especially when a mesh had been used].
- The risk of recurrence [return of the hernia in the future] is only 1-2%.

Your Groin Hernia Operation

1. Before your operation

The procedure can easily be done as a day case procedure but most patients remain in hospital overnight.

Day case surgery means that after surgery, when you recover from anesthesia [3-4 hours] your escort will take you home.

Patients should not shave the groin area themselves. This will be done in theatre.

2. Coming into hospital

You will be asked to come in either the morning (06h00) of your operation without drinking anything after midnight or at 12H00 in case of an afternoon procedure (NPO after 7H00). Please bring with you all the medicines you are taking to show to the doctor.

A nurse, who will note your personal details, will receive you in the ward and she will ask about any other conditions you suffer from. The doctor who will give you anesthesia will also visit you. Many people are concerned about anesthetics, so please ask the anesthetist if you have any specific worries so that he may reassure you. All of these people are ready to answer any questions that you may have, so please ask.

You will be asked to sign a consent form that the procedure has been explained to you and you agree to go ahead.

3. The operation

This is usually performed under general anesthesia. Local anesthesia may be occasionally used.

The open operation involves a 6-8cm cut in the groin for the open procedure and three small incisions for the laparoscopic procedure.

The surgeon will select the type of procedure that suits you better based on the type of your hernia and your overall condition.

4. Mobilization and going home

- You will be able to make a few steps and go to the bathroom when you recover from anaesthesia. The earlier the patient is out of bed and walking the better; however, for the first week take things easy. You will increase your activities gradually.
- Three times a day take a short walk [a few hundred meters would do, but more if you wish] to avoid stiffness of the muscles and joints. Some slight discomfort is normal.
- You will be given a prescription for pain medication.
- Difficulty urinating after surgery is not unusual and may require a temporary tube into the urinary bladder for as long as one week
- Occasionally, some severe local twinges of pain may occur in some patients and may persist for a couple of months.

5. What next?

- The wound is covered by a waterproof dressing for 5 to 7 days. The wound should be kept dry for two weeks. Change the dressing if it becomes soiled or wet.
- Driving should be avoided for 2 weeks if possible. In case an emergency stop is done, it can cause damage to the repair.
- Walking, swimming, cycling and light exercise are allowed as long as the wound is comfortable after two weeks.
- Avoid lifting heavy objects and all strenuous sports for 6 to 12 weeks
- A follow-up consultation must be made six weeks after the procedure;
- The sutures or clips can be removed after 10 days by your GP or local wound care clinic. An appointment need to be made. Sometimes dissolvable sutures are used.

6. What complications should you look for?

If the following occurs contact your surgeon urgently, come to casualties or see your GP:

- Persistent fever over 38 °C;
- Bleeding;
- Increasing abdominal or groin swelling,

- Pain that is not relieved by your medications;
 - Persistent nausea or vomiting;
 - Inability to urinate;
 - Chills;
 - Persistent cough or shortness of breath;
 - Purulent drainage (pus) from any incision;
 - Redness surrounding any of your incisions that is worsening or getting bigger;
 - You are unable to eat or drink liquids.
- Sometimes a little blood will ooze from the wounds for the first 12-24 hours. This usually stops on its own. If necessary, press on the wound for 10 minutes.
 - Some skin bruising is usually present after 2-3 days but should cause no concern as it disappears in 7-10 days.
 - It is usual to have some thickening around the wound. This is scar tissue and will soften up within a few months. The scar will be red to begin with but will fade with time and leave a white line. However, if the thickening is accompanied by excess swelling, redness and increasing pain may represent wound infection. Extremely rarely the infection is deep and may not respond to antibiotics. If mesh had been used for the repair, the wound may have to be re-opened and the mesh removed.
 - You may notice some numbness in the scar and the groin area, which is common and mostly settles within a couple of months.
 - Some patients experience odd sensations in the first few months following hernia repair, described as dragging or pulling sensations and though to be related to pulling on nerves during the operation and the healing process. If they do occur, they settle within a few months.
 - An extremely rare complication is pain in the upper thigh or the genitalia due to nerve entrapment within the stitches. If it does not settle, then repeat surgery to remove the constricting stitches can sometimes be considered.
 - The groin cut is along the crease skin lines and the scar will continue to fade for 6-12 months and quite often is not visible at all, leaving just a white line.

7. Return to normal activity?

You can return to work when you feel sufficiently well, generally after a week or two. You will receive a sick certificate on discharge from the ward.



ECS/Sept 2011