

Femoral hernia treatment

What is a femoral hernia?

- A femoral hernia is a buldge which appears in the groin, when the inside layers of the abdominal muscle have weakened and when tissue pushes into the space below inguinal fold (Figure 1).
- The femoral protrusion contains a small bag of abdominal lining; it is 'the hernia sac'.
- The hernia sac can be empty or it can be fill with the fatty tissue (omentum) or part of the bowel.
- This type of hernia is more common in elder women.
- If hernia sac is empty, the condition is called as 'reducible hernia'
- It causes a bulge that enlarges with standing, prolonged sitting, straining during urination or bowel movements or coughing.
- The hernia sac can be fill with the not-reducible abdominal content - fatty tissue or bowel loop.
- Severe, continuous pain, redness, and tenderness are signs that the hernia may be strangulated.
- Strangulation of the bowel loop can cause a bowel rupture (Figure 2).

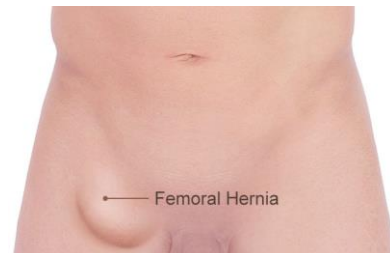


Figure 1. Right femoral hernia



Figure 2. Strangulated small bowel loop within left femoral hernia sac

What are the treatment options?

- Every femoral hernia should be repaired when found because of high risk of incarceration, which is up to 40 percent.
- Planned surgery is the only definitive treatment for reducible femoral hernia.
- Most commonly the area of weakness is covered with a knitted, soft, plastic-like material called mesh.
- Planned surgery be performed in an "open" fashion, where a small cut is made over the groin area. This can also be completed performing key-hole surgery.

- Emergency (not planned) surgery is the only definitive treatment for not-reducible and strangulated femoral hernia.
- This can be done only in an “open” fashion.

What are the benefits of surgery?

Benefits of planned surgery are:

1. to inspect hernia sac,
2. to repair hernia,
3. to prevent hernia complications,
4. to help with discomfort.

Benefits of emergency surgery are:

1. to inspect hernia content,
2. to remove not-viable tissues,
3. to repair hernia,
4. to prevent further complications.

The planned procedure involves the use of anaesthesia, either local or general.

It is very important to explain to patients that there is strong evidence that stopping smoking several weeks before general anaesthetic reduces a risk of getting complications.

If the patient is overweight, losing weight will also reduce the risk of developing complications.

The not-planned (emergency) procedure involves the use of general anaesthesia.

How an open femoral hernia repair is performed?

- 5 cm long incision above the hernia or over it (Figure 3).
- Dissection of the hernia sac.
- Careful inspection and (if needed) exploration of hernia sac.
- Removal of unhealthy tissue.

- Pushing health hernia sac contents back into the abdominal cavity.
- Cutting away the protruding sac.
- Placement (or not) of the synthetic (prolen) mesh above abdominal lining and muscle **or** closure of the abdominal wall defect with sutures (stitches).
- Closure of the wound.
- The dressing is shower-proof.
- The patient should keep it on for five days after surgery.

It is important to note that a cut in the middle of the tummy can be done in emergency setting if a part of the bowel is dead and it has to be removed.

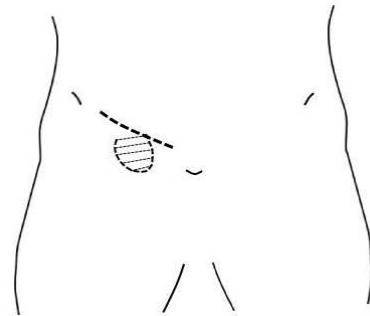


Figure 3. Incision above the femoral hernia

What are the complications of a hernia repair?

Paraumbilical / umbilical hernia repair is generally a very safe operation.

Most people will not experience any postoperative complications. Some discomfort around the scar is normal.

The risks are for:

1. Complications from anaesthesia
2. General complications of any surgery
3. Complications of a femoral hernia repair

1. Complications from anaesthesia

The Anaesthetist will discuss this with them.

2. General complications of any surgery

Following intraoperative complications may occur:

- ✓ Injury to internal organ
- ✓ Bleeding
- ✓ Injury to nerve

Postoperative complications include:

- ✓ Bleeding or collection of blood
- ✓ Infection of :
 - wound (including a mesh),
 - tummy,
 - chest
- ✓ Blood clots in the veins of legs (deep vein thrombosis / DVT) or lungs (a pulmonary embolism)
- ✓ Bowel blockage due to internal scarring (adhesions)
- ✓ Hernia in the area of the cut / scar

3. Complications of a femoral hernia repair

- ✓ Urinary retention
- ✓ Injury to the bladder or bowel
- ✓ Injury of femoral vein or narrowing of this vein
- ✓ Infection of mesh
- ✓ Temporal weakness of the leg
- ✓ Chronic postherniorrhaphy groin pain
- ✓ Recurrent hernia

Important points

- Wound hematoma usually disappear gradually however some of them may leak out through the wound. If so, regular change of dressings is required only.

- Minor wound infections do not need any specific treatment.
- Infection of mesh manifests a few days or weeks after surgery in form of persistent pus discharge from the wound. This requires surgery to remove the infected mesh and antibiotics.
- Management of chronic postherniorrhaphy groin pain is challenging
- Recurrence after is more likely synthetic mesh was not used for hernia repair.

What are the estimated risks for complications?

- ✓ For injury to bladder: 1 of 10,000 (rare)
- ✓ For injury to bowel: 1 of 10,000 (rare)
- ✓ For urinary retention: 1 of 100 (common)
- ✓ For wound hematoma: 1 of 100 (common)
- ✓ For minor infection: 1 of 100 (common)
- ✓ For mesh infection: 1:1,000 (uncommon)
- ✓ For temporal weakness of the leg: 1:10,000
- ✓ Injury of the femoral vein or narrowing of this vein: < 1:10,000 (very rare)
- ✓ For recurrence of hernia: 1:50 (common)

Are there any alternatives to a femoral hernia repair?

There are no alternatives for emergency femoral hernia repair. There are two alternatives to planned paraumbilical / umbilical hernia repair:

1. not to have any surgery to the femoral hernia (however, the chance of strangulation is high – 40%),
2. laparoscopic (keyhole) surgery.

When patient is not fit to have surgery due to age and frailty or due to severe medical problems, a groin hernia elastic truss belt (belt with external pressure cup) can be used to prevent from bowel protruding out in the hernia bulge and diminish groin hernia pain.

What can you expect after surgery

Eating

There are no dietary restrictions following planned or not-planned femoral hernia surgery without removal of part of the bowel and you may resume to a normal diet within 4 hours after surgery.

If you have undergone emergency surgery which required removal of part of the bowel, surgeon will explain you when you may resume to a normal diet.

Bowels

It's important to get plenty of fibre in your diet while you are recovering following planned surgery. Fresh fruit and vegetables will help to keep your bowels moving regularly.

Sometimes codeine based pain killers can slow down normal bowel movement. If you have not had a bowel movement in three days following surgery, a mild laxative should help. Your local chemist should be able to advise you.

If you have undergone emergency surgery which required removal of part of the bowel, your bowel movement may be unusual.

Discharge

The patient is usually either kept in hospital for about 12-24 hrs after a planned femoral hernia repair.

The patient is usually kept in hospital for about three days after a not-planned (emergency) femoral hernia repair with removal of part of the bowel.

Wound and scar

The wound may be closed in various ways, including dissolvable stitches or skin staplers. This cut will leave a scar on the groin or abdomen.

Stitches

If you have stitches or skin staplers which need to be removed, this can usually be done by the practice nurse at your GP surgery, 10 days after your operation.

Dressings

You do not need to worry about getting the scar wet. Many patients have concerns that standing up straight will pull at the stitches. Don't worry about this. Getting out of bed and standing up straight will actually help you to recover more quickly.

Discomfort

You will experience pain and discomfort around the wound and scar, especially for the first few days.

Painkillers

Painkillers will be prescribed for you for about 10 days.

Returning to normal daily physical activities

You should avoid heavy lifting and vigorous exercise for at least four weeks.

Getting back to work

In most cases it's usually safe to return to work 14 days after a femoral hernia repair.

People whose work involves a lot of heavy lifting, or standing up or walking for long periods of time, will not be able to return to work as quickly as those who have office jobs. If so, you will need up to three weeks off work.

Driving

It is advisable not to restart driving for about 14 after a femoral hernia repair. Before resuming driving, you should be free from the sedative effects of any painkillers you may be taking.

You should be comfortable in the driving position and able to safely control your car, including freely performing an emergency stop. Please be aware that driving whilst unfit may invalidate your insurance.

When do I have to contact doctor if I have concerns or questions?

Call your doctor if you have:

Increased or persistent pain not relieved with pain relief medications

- ✓ Redness or swelling around the wound
- ✓ Discharge of pus or blood from the wound
- ✓ Increased pain in the abdomen
- ✓ Persistent fever
- ✓ Temperature above 38°C
- ✓ Shakes, swelling, chills, rigors
- ✓ Uncontrolled vomiting
- ✓ Persistent bloating of the stomach
- ✓ Inability to have a bowel movement after four days
- ✓ Dizziness/feelings of faintness
- ✓ Blood in your vomit, urine, or cough

Who do I contact if I have questions or concerns?

- A. Contacting during working hours (9am - 5pm in the working week)

Please contact the secretary and leave a message for the surgical team. You will be contacted with appropriate advice or management plan. If you think that your condition is serious then it is best to come straight to Aintree Accident &

Emergency department*, which can manage serious problems in the best possible manner.

- B. Out of hours (after 5pm during working week/weekend/bank holiday)

Please seek advice from your GP for minor complications.

If you are not sure or if you think it is a serious problem, please come to Aintree Accident & Emergency department* for a review.

Hospital switch board tel: 0151 529 5980.

***When you come to the hospital please bring this and any other relevant discharge documents that you may have been given at the time of discharge to help the A&E doctors to decide your management.**

Are there any other sources of information?

Here is a list of websites that offer safe, sensible, useful information:

<http://www.carolinashealthcare.org/hernia-handbook-ebook>

http://www.wvl.nhs.uk/library/all_new_pi_docs/audio_leaflets/ward_3/hernia_femoral/ft2_repair_of_femoral_hernia.pdf

<http://www.femorahernia.co.uk/femoral-hernia-london.html>

<http://www.gastrosurgery.co.uk/patient-info/conditions/hernia/femoral-hernia-treatment-london/>



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