Patient information

Laparoscopic Repair of Hiatus Hernia

General Surgery – Aintree Hospital

What is Hiatus Hernia?

Hiatus hernia is caused by a widening of the natural opening in the diaphragm, a flat muscle that separates the chest from the abdomen, allowing a portion of the stomach (which normally wholly resides in the abdominal cavity) to variably protrude into the chest.

If the valve between gullet (oesophagus) and stomach is incompetent in addition, then hiatus hernia may be associated with heart burn or reflux symptoms as well.

If this is present then the operation may change to include anti-reflux procedure as well.

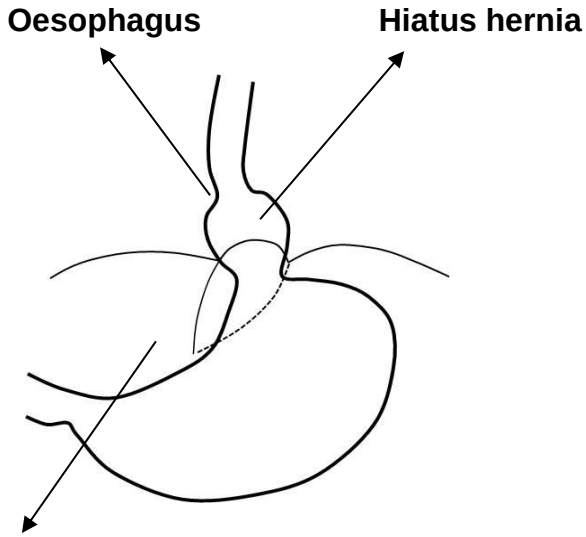
What are the risks of Hiatus Hernia?

1. Heartburn or reflux, also called acid indigestion, is a common symptom of hiatus hernia. The acidic content (and sometimes bile) can cause damage to the lining of the oesophagus.
2. Dysphagia or difficulty in swallowing – this can occur with large hiatus hernias which cause pressure on the gullet or oesophagus.
3. Breathing difficulties – this again is due to pressure of large hiatus hernias on the lower part of lungs.
4. Palpitations – this can happen due to large hiatus hernias pressing on part of heart when distended with food.
5. Twisting of stomach (volvulus) – this is a known rare complication of a large hiatus hernia, whereby the stomach twists around itself. This can result in strangulation of the stomach involved and usually requires emergency life-saving surgery. The stomach may need to be removed in the emergency surgery if it is not viable.

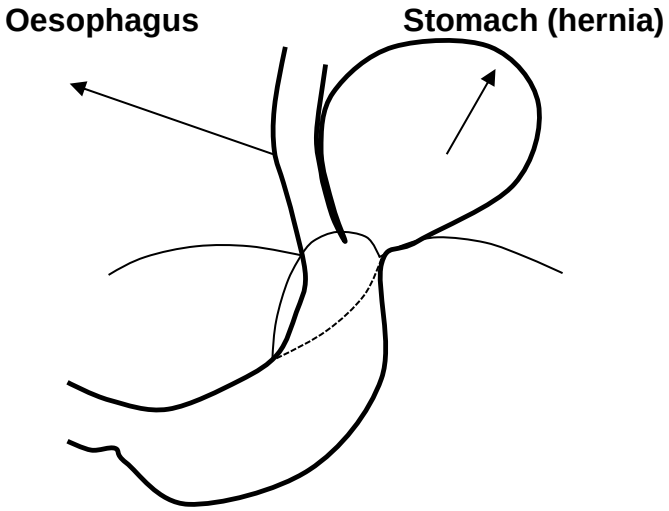
Types of Hiatus Hernia

1. **Sliding** – where the gullet and stomach both go into chest. Heart burn is common in this group.
2. **Rolling** – where the stomach rolls up next to the gullet and the junction between the gullet and stomach stays at the level of the diaphragm. Heart burn is not usually associated in these cases.

Sliding Hiatus Hernia



Rolling Hiatus Hernia



How is hiatus hernia investigated?

Gastroscopy – This is a camera (endoscopic) examination of the gullet and stomach. This also helps with looking for changes of reflux or heart burn. It is performed under throat spray and/or sedation (which makes you feel sleepy).

Barium swallow – This test is done in the X-ray department. You will be asked to drink a liquid dye (barium) and serial X-rays will be taken to see how the dye goes down your gullet into the stomach. This helps in the diagnosis occasionally but may not be done routinely.

Other tests may be done by your Physician or Surgeon, if necessary (for example more tests for heart burn or a CT scan).

How is hiatus hernia usually treated?

Large hiatus hernia will often need surgical treatment. If severe reflux is also associated then this is combined with anti-reflux surgery.

The aim of the operation is to reduce or bring back the stomach to it's natural position and fix it in place (gastropexy).

This operation is usually done laparoscopically (key-hole), but rarely an open operation is needed (especially in emergency situation).

How is the laparoscopic ('key-hole') surgery performed?

A laparoscopic or 'key-hole' surgical procedure is an alternative to traditional or what is known as 'open' surgery, in which a large incision must be made.

At Aintree Hospital, we provide patients with this technologically advanced option.

Our surgeons use 'key-hole' surgery to do this operation using incisions/cuts of half to quarter of an inch size.

Laparoscopic/'key-hole' surgery eliminates the need for a long incision.

Small incisions are made to accommodate small tubes called 'trocars'.

These create a passageway for special surgical instruments and a camera (laparoscope).

A laparoscope is a fiber-optic instrument that is inserted in the abdominal wall.

This device transmits images from within the body to a video monitor, allowing the surgeon to see the operative area on the screen.

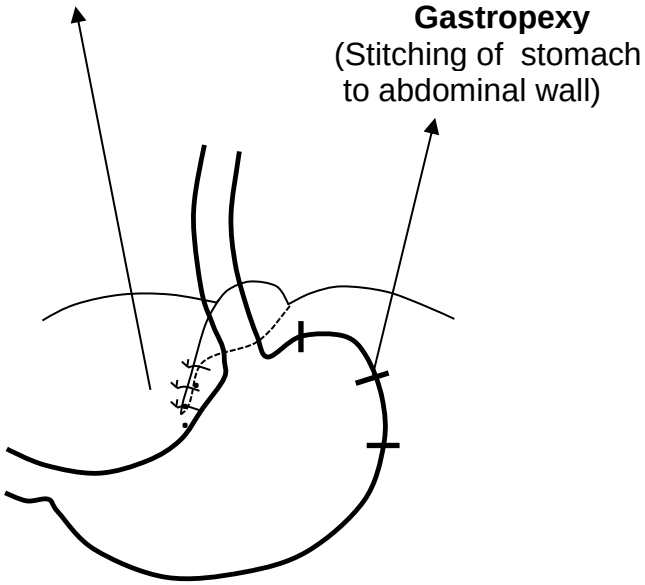
During the key-hole procedure, surgeons use small surgical tools and a laparoscope (camera) to repair the hiatus hernia and fix the stomach to the abdominal wall.

What is Gastropexy?

Gastropexy means fixing the stomach to abdominal wall. This is done to prevent the stomach from slipping back into the chest after repair of hiatus hernia.This is done by using stitches taken between the stomach wall and abdominal wall. This is done after repairing the diaphragm opening (hiatus hernia repair).

Repair of diaphragm

(after hiatus hernia correction)



Why is laparoscopic or 'key-hole' surgery better?

Laparoscopic surgery has many advantages over traditional surgery.

Less pain, less scarring and early recovery time are two of the most significant advantages of this procedure.

Hospital stays are reduced and total recovery time is cut in half.

The risk of infection is also lower because of the smaller incisions.

Laparoscopic surgery usually requires only a one-day hospital stay instead of four to five days required for traditional surgery.

In many cases a patient's total recovery time can be as little as one to two weeks, compared with four to six weeks for traditional surgery.

How long will I have to stay in hospital? When can I resume normal activities?

The laparoscopic surgery often requires a hospital stay of only 23 hours.

You should be able to return to normal activities between one and two weeks, compared with four to six weeks for traditional surgery.

What can I do to help make the operation a success?

Lifestyle changes

If you smoke, try to stop smoking now. There is strong evidence that stopping smoking several weeks before general anaesthetic reduces your risk of getting complications.

If you are overweight, losing weight will also reduce our risk of developing complications.

If you need help to stop smoking or lose weight, ask a member of the healthcare team or your GP for advice.

Medication

You should continue your normal medication unless you are told otherwise. You should inform your surgeon if you take **warfarin, aspirin or clopidogrel.**

Follow your surgeon's advice about stopping this medication before your operation.

What complications can occur?

The healthcare team will try and make your operation as safe as possible. However, some complications can happen, some of these can be serious and can even cause death.

You should ask your doctor if there is anything you don't understand. Your doctor may be able to tell you if your risk of complications is higher or lower for you.

The complications fall into three categories:

1. Complications from anaesthesia.
2. General complications of any operation.
3. Specific complications for this operation.

1 Complications from anaesthesia

Your anaesthetist will be able to discuss with you the possible complications of having an anaesthetic.

2 General complications of any operation

- **Pain –** It is normal to have pain after surgery. The healthcare team will try and reduce your pain by giving you medication to control it.It is important you take your medication as advised so that you can move about and cough freely.

  After a laparoscopy, it is common to feel bloated and to have pain in your shoulders because a small amount of gas may be left under your diaphragm.

  Your body will usually absorb the gas naturally over the next 24 hours, which will ease the symptoms. You may also notice that you have a slightly sore throat. This is due to the 'breathing' tube which is placed in your throat during surgery and should subside in a day or two.

- **Bleeding –** During or after surgery. This occasionally requires blood transfusions or further surgery.

- **Infection in the surgical wound –** This may require treatment with antibiotics or occasionally further surgery.

- **Developing a hernia in the scar –** If you have open surgery, the deep muscle layers may fail to heal causing an incisional hernia. This appears as a bulge or rupture and if it causes problems may require a further operation.

- **Blood clots –** In the legs (deep vein thrombosis).

  This can occasionally move through the bloodstream to the lungs causing a pulmonary embolism (PE), making it difficult for you to breathe.

  The nurses will encourage you to mobilise soon after surgery and may give you injections to reduce the risk of blood clots.

3 Specific complications for this operation

A Laparoscopic complications

- **Damage to internal organs –** When placing instruments into the abdomen (risk 1 in 1,000). The risk is higher in people who have previously had surgery to the abdomen.

  If an injury does happen, you may require open surgery, which involves a much larger cut.

  About one in three of these injuries is not obvious until after surgery, so if you have been in pain which does not improve each day after surgery, you should let your doctor know.

- **Developing a hernia near one of the cuts used to insert the ports –** (Risk 2 in 10,000). Your surgeon will try and reduce this risk by using small ports (less than 10mm in diameter) where possible or, if they need to use larger ports, using deeper stitching techniques to close the cuts.

- **Surgical emphysema –** (Crackling sensation in the skin due to trapped gas), which settles quickly and is not serious.

B Hiatus Hernia Repair and Gastropexy procedure complications

- **Injury to surrounding organs –** It is possible, but **extremely rare** for injury to occur to the oesophagus, stomach, spleen, liver or bowel, which are in the field of surgery.

- **Nausea and Abdominal pain –** Sometimes after eating the stomach (due to the anchorage to abdominal wall) may cause nausea and abdominal pain, which can be vague or non-specific. This usually settles down with time. It can occasionally cause bloating as well.

- **Dysphagia –** difficulty in swallowing solids is not common unless the operation is combined with anti-reflux surgery.

  Dietary advice sheet will be given in the latter case.

How soon will I recover?

In hospital

Following your operation you will be transferred to the recovery area and then to the ward. You should be able to go home later that day or the following day.However, your doctor may recommend that you stay a little longer.

At home

Returning to normal daily activities – After a week or so you

- should be able to resume most of your normal daily activities.

  It is normal to feel tiered after surgery, so take some rest, two to three times a day and try and get a good night sleep.

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

- **Driving –** You should not drive for at least one week.
  Before driving you should ensure that you can perform a full emergency stop, have the strength and capability to control the car, and be able to respond quickly to any situation that may occur.

  Please be aware that driving whilst unfit may invalidate your insurance.

- **Returning to work –** You can return to work as soon as you feel well enough. This will depend on how you are feeling and the type of work you do. Typically you will need between two and three weeks off work.

- **Eating –** Normal food is tolerated by most people after surgery.It makes sense to start with light diet for two-three days and progress to normal food gradually.

  If anti-reflux operation is also done then special diet instructions will be given.

- **Bowels –** You may find it takes three or four days to have normal 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.

  Alternatively, you may experience some diarrhoea following surgery. This should settle within three to four weeks. If the diarrhoea is bothersome your local chemist can advise on over- the-counter remedies.

  Remember to drink plenty of fluids so that you don’t get dehydrated.

When should I seek advice?

- If you have a discharge of blood or pus from your wounds.
- If you develop a temperature above 38.5C.
- Vomiting that continues for more than three days after surgery.
- Inability to have a bowel movement after four days.

- Persistent pain not relieved with your prescribed painkillers.
- Persistent abdominal distension (bloating of your stomach).
- Increasing pain or swelling around your wounds.

What do I do if there are problems after surgery?

Please read this leaflet carefully regarding side-effects and risks of surgery.

Check with your doctor before discharge from hospital after surgery.

1. Standard procedure to follow would be to contact the consultant's secretary and ask for advice in working hours. The secretary may be able to contact the registrar or the consultant for advice that may be passed on to you.

2. If no team member is available to deal with your query or if you have any problems out of hours, it is best to check with your GP or attend the Accident and Emergency Department at Aintree Hospital for a clinical review and advice.

What is the success rate for this surgery/procedure?

This is a simple operation and usually resolves the problem in most patients successfully.

Over long term some patients may get a recurrence of small hernia, which is usually asymptomatic and does not need treatment. Rarely the hiatus hernia repair can fail completely and the operation may need to be done again.

Feedback

Your feedback is important to us and helps us influence care in the future.

Following your discharge from hospital or attendance at your outpatient appointment you will receive a text asking if you would recommend our service to others. Please take the time to text back, you will not be charged for the text and can opt out at any point. Your co-operation is greatly appreciated.

Further information

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