

## UG21 Laparoscopic Heller's Cardiomyotomy

Expires end of May 2015  
Issued December 2013

You can get information locally by contacting the Senior Nurse on duty at your local Ramsay Health Care hospital or treatment centre.

Get more information, references and share your experience at [www.aboutmyhealth.org](http://www.aboutmyhealth.org)  
Tell us how useful you found this document at [www.patientfeedback.org](http://www.patientfeedback.org)



[www.rcseng.ac.uk](http://www.rcseng.ac.uk)

[www.rcsed.ac.uk](http://www.rcsed.ac.uk)

[www.asgbi.org.uk](http://www.asgbi.org.uk)

[www.pre-op.org](http://www.pre-op.org)

## What is achalasia?

Achalasia is a condition that causes problems with swallowing. It can also cause regurgitation (bringing food back into your mouth), chest pain and weight loss.

Your surgeon has recommended a Heller's cardiomyotomy. However, it is your decision to go ahead with the operation or not. This document will give you information about the benefits and risks to help you to make an informed decision.

If you have any questions that this document does not answer, ask your surgeon or the healthcare team.

## How does achalasia happen?

There is no known reason why achalasia happens. It is not a problem that runs in the family.

Normally when you swallow, co-ordinated muscle contractions (called peristalsis) move food down your oesophagus (gullet) and into your stomach. The cardiac sphincter (or lower oesophageal sphincter) is the valve that controls how food passes into your stomach. This valve should relax when you swallow, allowing food into your stomach, and then contract to prevent food from returning into your oesophagus. Achalasia is where the valve does not relax properly and peristalsis does not work well enough.

## What are the benefits of surgery?

The aim is to make it easier for you to swallow. The benefits will often last for a lifetime.

## Are there any alternatives to surgery?

Achalasia is not life-threatening. The alternatives to surgery will usually give only temporary relief from your symptoms.

- Changing the way you eat – Eating in an upright position and drinking plenty of fluid with your food. Any improvement will not usually last for long.
- Changing what you eat – Eating more liquid food may help for a short time.
- Medication – Treatment to stimulate the muscles of your oesophagus is useful only in the early stages of the condition and may improve symptoms a little.

- Botox injections – This involves using a flexible telescope (endoscope) to inject botulinum toxin into the valve. This can relieve symptoms for up to three months. There are risks associated with the long-term use of Botox injections and they are not successful in some people.

- Balloon dilatation – This involves inflating a balloon in the cardiac sphincter to make it wider. A dilatation is the most successful non-surgical treatment with benefits lasting for up to three years. However, there is a small but serious risk of tearing your oesophagus. Surgery is the only dependable way to give lasting relief from your symptoms.

## What will happen if I decide not to have the operation?

Your surgeon will recommend the most appropriate non-surgical treatment for you but your symptoms are likely to get worse over time.

## What does the operation involve?

Achalasia is treated surgically by cutting the muscle of the cardiac sphincter. This should open the passage between your oesophagus and stomach, making it easier for you to swallow. The healthcare team will carry out a number of checks to make sure you have the operation you came in for. You can help by confirming to your surgeon and the healthcare team your name and the operation you are having.

The operation is performed under a general anaesthetic and usually takes an hour to 90 minutes. You may also have injections of local anaesthetic to help with the pain after the operation. You may be given antibiotics during the operation to reduce the risk of infection. Your surgeon will use laparoscopic (keyhole) surgery, as this is associated with less pain, less scarring and a faster return to normal activities. Your surgeon will make a small cut on or near your umbilicus (belly button) so they can insert an instrument in your abdominal cavity to inflate it with gas (carbon dioxide). They will make several small cuts on your abdomen so they can insert tubes (ports) into your abdomen.

Your surgeon will insert surgical instruments through the ports along with a telescope so they can see inside your abdomen and perform the operation (see figure 1).

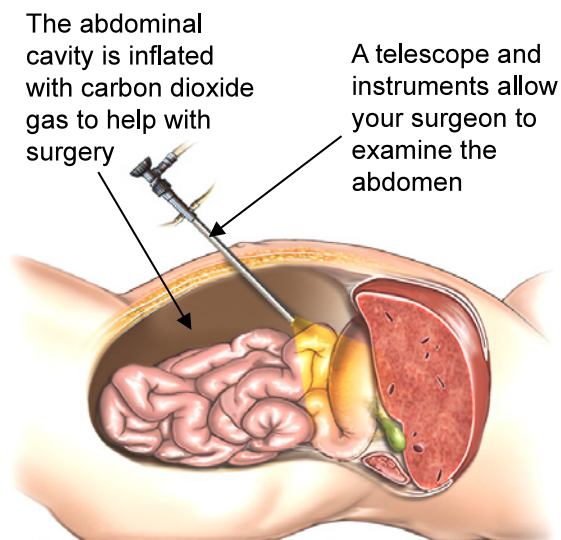


Figure 1

The technique for laparoscopic surgery

Your surgeon will cut and spread apart the layers of muscle of the cardiac sphincter and lower end of your oesophagus (see figure 2). The muscle will heal.

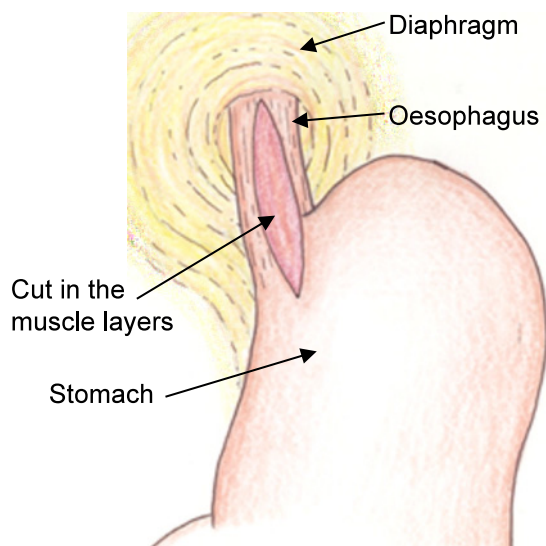


Figure 2

Heller's cardiomyotomy

Your surgeon may wrap the top part of your stomach around the valve to reduce the risk of acid reflux (where acid from your stomach travels up into your oesophagus). This is called a fundoplication.

For about 1 in 20 people it will not be possible to complete the operation using keyhole surgery. The operation will be changed (converted) to open surgery, which involves a larger cut on your upper abdomen.

Your surgeon will remove the instruments and close the cuts.

### What should I do about my medication?

Let your doctor know about all the medication you take and follow their advice. This includes all blood-thinning medication as well as herbal and complementary remedies, dietary supplements, and medication you can buy over the counter.

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

If you smoke, stopping smoking several weeks or more before the operation may reduce your risk of developing complications and will improve your long-term health.

Try to maintain a healthy weight. You have a higher risk of developing complications if you are overweight.

Regular exercise should help to prepare you for the operation, help you to recover and improve your long-term health. Before you start exercising, ask the healthcare team or your GP for advice.

You can reduce your risk of infection in a surgical wound.

- In the week before the operation, do not shave or wax the area where a cut is likely to be made.
- Try to have a bath or shower either the day before or on the day of the operation.
- Keep warm around the time of the operation. Let the healthcare team know if you feel cold.

### What complications can happen?

The healthcare team will try to make the operation as safe as possible but complications can happen. Some of these can be serious and can even cause death.

Using keyhole surgery means it is more difficult for your surgeon to notice some complications that may happen during the operation. When you are recovering, you need to be aware of the symptoms that may show that you have a serious complication.

You should ask your doctor if there is anything you do not understand.

Any numbers which relate to risk are from studies of people who have had this operation. Your doctor may be able to tell you if the risk of a complication is higher or lower for you.

### 1 Complications of anaesthesia

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

## 2 General complications of any operation

- Pain. The healthcare team will give you medication to control the pain and it is important that you take it as you are told so you can move about and cough freely. After keyhole surgery, it is common to have some pain in your shoulders because a small amount of carbon dioxide 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.
- Bleeding during or after the operation. Rarely, you will need a blood transfusion or another operation.
- Infection of the surgical site (wound). It is usually safe to shower after two days but you should check with the healthcare team. Let the healthcare team know if you get a high temperature, notice pus in your wound, or if your wound becomes red, sore or painful. An infection usually settles with antibiotics but you may need another operation.
- Unsightly scarring of your skin.
- Developing a hernia in the scar, if you have open surgery, caused by the deep muscle layers failing to heal. This appears as a bulge or rupture called an incisional hernia. If this causes problems, you may need another operation.
- Blood clot in your leg (deep-vein thrombosis – DVT). This can cause pain, swelling or redness in your leg, or the veins near the surface of your leg to appear larger than normal. The healthcare team will assess your risk. They will encourage you to get out of bed soon after the operation and may give you injections, medication, or special stockings to wear. Let the healthcare team know straightaway if you think you might have a DVT.
- Blood clot in your lung (pulmonary embolus), if a blood clot moves through your bloodstream to your lungs. If you become short of breath, feel pain in your chest or upper back, or if you cough up blood, let the healthcare team know straightaway. If you are at home, call an ambulance or go immediately to your nearest Emergency department.

## 3 Specific complications of this operation

- a Keyhole surgery complications
- Surgical emphysema (crackling sensation in your skin caused by trapped carbon dioxide gas), which settles quickly and is not serious.

- Damage to structures such as your bowel, bladder or blood vessels when inserting instruments into your abdomen (risk: less than 3 in 1,000). The risk is higher if you have had previous surgery to your abdomen. If an injury does happen, you may need open surgery. About 1 in 3 of these injuries is not obvious until after the operation.

- Developing a hernia near one of the cuts used to insert the ports (risk: 1 in 100). Your surgeon will try to reduce this risk by using small ports (less than a centimetre in diameter) where possible or, if they need to use larger ports, using deeper stitching to close the cuts.

### b Cardiomyotomy complications

- Making a hole in your oesophagus or stomach. Your surgeon will usually notice any damage and repair it during the operation. If your surgeon does not notice the damage, it can lead to serious complications. For this reason you may have an endoscopy (a procedure to look at the inside of your oesophagus and stomach using a flexible telescope) while you are still under general anaesthetic. Or, you may not be given anything to eat until you have had an x-ray.

- Difficulty swallowing. This usually happens because of inflamed tissue and gets better within two months. Problems caused by poor peristalsis often carry on but swallowing is generally much easier.

- Developing acid reflux, which causes a burning sensation in your chest ('heartburn') or acid in the back of your mouth (risk: 1 in 10 with a fundoplication, 7 in 10 without a fundoplication). You may need medication to control the heartburn. The acid can cause your oesophagus to narrow.

- Pneumothorax, where air escapes into the space around your lung. Sometimes the air will need to be let out by inserting a tube in your chest (chest drain).

## How soon will I recover?

### • In hospital

After the operation you will be transferred to the recovery area and then to the ward. You should be able to go home within a few days. However, your doctor may recommend that you stay a little longer.

You will be given medication to prevent you from vomiting. You will be given a diet of soft foods.



You need to be aware of the following symptoms as they may show that you have a serious complication.

- Pain that gets worse over time or is severe when you move, breathe or cough.
- A high temperature or fever.
- Dizziness, feeling faint or shortness of breath.
- Feeling sick or not having any appetite (and this gets worse after the first one to two days).
- Not opening your bowels and not passing wind.
- Swelling of your abdomen.
- Difficulty passing urine.

If you do not continue to improve over the first few days, or if you have any of these symptoms, let the healthcare team know straightaway. If you are at home, contact your surgeon or GP. In an emergency, call an ambulance or go immediately to your nearest Emergency department.

#### • **Returning to normal activities**

To reduce the risk of a blood clot, make sure you follow carefully the instructions of the healthcare team if you have been given medication or need to wear special stockings.

You will need to eat slowly and chew your food thoroughly. Sit upright when you eat. Keep on soft foods at first and gradually build up to a normal diet when you can cope with it. If you find that food such as bread and meat get stuck, avoid them. Many people pass more wind, as they are unable to burp as usual.

You should be able to return to work after two weeks, depending on the extent of surgery and your type of work.

Your doctor may tell you not to do any manual work for a while. Do not lift anything heavy for a few weeks.

Regular exercise should help you to return to normal activities as soon as possible. Before you start exercising, ask the healthcare team or your GP for advice.

Do not drive until you are confident about controlling your vehicle and always check your insurance policy and with your doctor.

#### • **The future**

Most people make a good recovery. 9 in 10 people have much improved swallowing and can eat a normal diet.

## **Summary**

Achalasia is not life-threatening but the symptoms can be disabling. A Heller's cardiomyotomy is a dependable way to help you to swallow more easily for a long time. Surgery is usually safe and effective but complications can happen. You need to know about them to help you to make an informed decision about surgery. Knowing about them will also help to detect and treat any problems early.

**Keep this information leaflet. Use it to help you if you need to talk to a healthcare professional.**

## **Acknowledgements**

Author: Mr Ian Beckingham DM FRCS

Illustrations: Hannah Ravenscroft RM and Medical Illustration Copyright © 2012 Nucleus Medical Art. All rights reserved. [www.nucleusinc.com](http://www.nucleusinc.com)

**This document is intended for information purposes only and should not replace advice that your relevant health professional would give you.**