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Laparoscopic Heller’s Cardiomyotomy

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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 laparoscopic 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 make an informed decision. If you have any questions that this document does not answer, you should ask your surgeon or any member of 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 the oesophagus (gullet) and into your stomach. The cardiac sphincter (or lower oesophageal sphincter) is the valve that controls how food passes into the stomach. This valve should relax when you swallow, allowing food into your stomach, and then contract to prevent food returning into the 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 of surgery 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 of your symptoms.
- Changing the way you eat – Eating in an upright position and drinking plenty of fluid with your food. Any improvement will usually not last for long.
- Changing what you eat – Eating more liquid food may help for a short time.
- Medications – Drug treatment to stimulate the muscles of the 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 the oesophagus. Surgery is the only dependable way to give lasting relief of 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. However, 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 the 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 between an hour and an hour and a half. You may also have injections of local anaesthetic to help with the pain after surgery. You may be given antibiotics during the operation to reduce the risk of infection. Your surgeon has recommended 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 in or near your umbilicus (belly button) so they can insert an instrument which inflates the abdominal cavity 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 place surgical instruments through the ports along with a telescope so they can see inside your abdomen and perform the operation (see figure 1).

The abdominal cavity is inflated with carbon dioxide gas to help with surgery

A telescope and instruments allow your surgeon to examine the abdomen

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 the oesophagus (see figure 2). The muscle will heal on its own. Sometimes your surgeon will wrap the top part of the stomach around the valve to reduce the risk of acid reflux (acid moving up from the stomach into the oesophagus). This is called a fundoplication.

In about 1 in 20 people it will not be possible to complete the operation using the laparoscopic technique. The operation will be changed (converted) to an open procedure, which involves a larger cut in the upper abdomen.

At the end of the operation, your surgeon will remove the instruments and close the cuts.

What should I do about my medication?

You should let your doctor know about all the medication you are on and follow their advice. This includes herbal remedies and medication to control diabetes and blood pressure. If you are on beta-blockers, you should continue to take them as normal.

You may need to stop taking warfarin or clopidogrel before your operation.

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

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

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

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

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

• In the week before your 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 your operation.
• Keep warm around the time of your operation. Let a member of the healthcare team know if you are cold.

What complications can happen?
The healthcare team will try to make your operation as safe as possible. However, complications can happen. Some of these can be serious and can even cause death. Using the laparoscopic technique means it is more difficult for your surgeon to notice 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, which happens with every operation. The healthcare team will try to reduce your pain. They 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 a laparoscopy, it is common to have some pain in your shoulders because a small amount of gas may be left under the diaphragm. Your body will usually absorb the gas naturally over the next 24 hours, which will ease the symptoms.
• Bleeding during or after surgery. Rarely a blood transfusion or an operation is needed.

• Infection of the surgical site (wound). It is usually safe to shower after 48 hours. However, you should check with a member of the healthcare team. Let the healthcare team know if you get a 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 an operation.
• Unsightly scarring of the skin, particularly if the wound becomes infected.
• 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 a further operation.
• Blood clot in the 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 surgery and may give you injections, medication, or special stockings to wear. Tell the healthcare team straightaway if you think you might have a DVT.
• Blood clot in the lung (pulmonary embolus). This happens if a blood clot moves through the bloodstream to your lungs. If you become short of breath, feel pain in your chest or upper back, or if you cough up blood, you may have a pulmonary embolism. You should tell the healthcare team straightaway or, if you are at home, go to your nearest Accident and Emergency department immediately or call an ambulance.

3 Specific complications of this operation
a Laparoscopic complications
• Damage to internal structures such as the bowel, bladder or blood vessels when placing instruments into the abdomen (risk: less than 3 in 1,000). The risk is higher in people who have previously had surgery to the abdomen. If an injury does happen, you may need open surgery, which involves a much bigger cut. About 1 in 3 of these injuries is not obvious until after surgery.
• Developing a hernia near one of the cuts used to insert the ports (risk: 2 in 10,000). 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 techniques to close the cuts.

• Surgical emphysema (crackling sensation in the skin due to trapped carbon dioxide gas), which settles quickly and is not serious.

b Cardiomyotomy complications

• Making a hole in the oesophagus or stomach. Usually your surgeon will 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 the oesophagus and stomach using a flexible telescope) while you are still under general anaesthetic. Or, you may not be allowed to eat anything after the operation until you have had an x-ray.

• Difficulty swallowing. Usually this happens because of inflamed tissue and settles over the first two months. Problems caused by poor peristalsis often carry on. However, swallowing is generally much easier after the operation.

• Acid reflux causing a burning sensation in the chest (‘heartburn’) or acid in the back of the 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 the oesophagus to narrow.

• Air in the chest cavity (pneumothorax), which may need a tube to be placed in the 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 short of breath.

• Feeling sick or not having any appetite (and this gets worse after the first one to two days).

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

• Returning to normal activities

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

You will need to eat slowly and chew your food thoroughly. You should eat while you are in an upright position. 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, you should 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 but this may vary depending on the extent of surgery and your type of work. Your doctor may tell you not to do any manual work at first and you should not do any heavy lifting for a few weeks.

Regular exercise should help you to return to normal activities as soon as possible. Before you start exercising, you should ask a member of 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 laparoscopic Heller’s cardiomyotomy is a dependable way to help you swallow more easily for a long time.
Surgery is usually safe and effective. However, complications can happen. You need to know about them to help you 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.

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