POEM (peroral endoscopic myotomy) for oesophageal achalasia

This leaflet explains more about POEM, including the benefits, risks and any alternatives and what you can expect when you come to hospital. If you have any further questions, please speak to a doctor or nurse caring for you.

What is POEM?
POEM is an operation which aims to improve the swallowing of patients who have achalasia of the oesophagus. In achalasia patients, the lower oesophageal sphincter muscle is tight and does not relax, blocking food from entering the stomach. Food then builds up in the oesophagus causing fullness, pain, reflux and other symptoms. During the POEM operation the lower oesophageal sphincter muscle fibres are cut (myotomy). The operation is performed under general anaesthetic in the operating theatre. An endoscope (thin, flexible tube) is passed through the mouth and the operation is done internally in the oesophagus without making a visible incision (cut) or wound.

Why should I have POEM?
POEM aims to improve swallowing in achalasia patients by allowing the oesophagus to empty. After POEM, patients should be able to eat and swallow more normally and chest discomfort caused by food lodged in the oesophagus should be significantly reduced. It should be remembered that achalasia is a life-long condition and swallowing will never be completely normal.

What are the risks?
As with other operations, there are risks of bleeding and oesophageal perforation with resulting chest infection. This may require further operations to repair. There is also a risk that not enough muscle fibres are divided and that difficulty in swallowing will persist or return after the operation. Cutting the lower oesophageal sphincter muscle unfortunately results in reflux of gastric acid into the oesophagus. Reflux symptoms can usually be controlled with anti-acid tablets. In the long term, about 30% of patients will require medication for reflux symptoms.

Are there any alternatives to POEM?
Some patients with achalasia prefer not to have an operation, but rather to follow a texture modified diet. The risk with such an approach is that the oesophagus will gradually stretch which may make future treatment difficult. The current standard way of cutting the lower oesophageal sphincter muscle is a keyhole operation called laparoscopic Hellers myotomy and fundoplication. This operation is performed under general anaesthetic. Four or five keyhole instruments are inserted through small incisions on the abdomen to cut the lower oesophageal
sphincter muscle fibres. During this operation a flap of stomach is sutured over the oesophagus (fundoplication) which significantly reduces gastro-oesophageal reflux in the long term.

Another technique to disrupt the lower oesophageal sphincter muscle fibres is pneumatic dilatation. This procedure is done under sedation when a hollow tube with a balloon at the end is passed down the oesophagus. The balloon is inflated and the lower oesophageal sphincter muscle fibres are slightly over-stretched until they break. The pneumatic dilatation often needs repeating until the desired number of muscle fibres are broken and swallowing is improved. Botox injection can provide temporary relief of swallowing in achalasia patients, but it is not a long-term solution and therefore not commonly used. In the long-term, 30% of patients require anti-acid medication after Hellers myotomy and pneumatic dilatation.

**How can I prepare for POEM?**
Before the operation you will be pre-assessed by our nursing staff in the outpatient clinic. It is important that you are on a liquid-only diet for three days before the operation to ensure that your oesophagus is empty. The surgeon may still wish to perform a gastroscopy and wash out your oesophagus on the day of the operation.

**Giving my consent (permission)**
We want to involve you in decisions about your care and treatment. If you decide to go ahead, you will be asked to sign a consent form. This states that you agree to have the treatment and you understand what it involves.

**What happens during POEM?**
The operation is done under general anaesthetic and takes about two hours. You should be given the leaflet, *Having an anaesthetic*. After passing a flexible endoscope through your mouth, a small incision is made in the oesophageal lining above the lower oesophageal sphincter muscle. The lower oesophageal sphincter muscle fibres are then carefully divided with a tiny electric cautery hook. At the end of the operation the incision in the oesophageal lining is closed with clips. Although no external cuts are made, the carbon dioxide gas that is used during the operation to inflate the oesophagus tends to travel and can cause chest, neck and abdominal pain and bloating. The carbon dioxide will be gone within hours after the operation.

**Will I feel any pain?**
You will be given analgesia (painkillers) during the operation and it will also be available afterwards. It is uncommon to need strong painkillers after one to two days. You will receive painkillers on discharge.

**What happens after POEM?**
Once the operation has finished you will stay in the post-operative recovery room until you are comfortable and fully awake. You will then be moved to an inpatient bed in the hospital. Nurses will perform regular checks of your pulse, blood pressure, temperature and breathing. Patients are encouraged to drink sips of water and to mobilise out of bed. The day after the operation you will have an X-ray to check that the internal clips are still sealing the incision in the oesophageal lining. If the X-ray is satisfactory you will be allowed to drink tea or other beverages. Discharge will be planned after one or two nights in hospital. If the X-ray is not satisfactory, or there are any other complications, you will need to stay in hospital longer until the problems have been resolved.
**What do I need to do after I go home?**
We ask patients to stay on a free-fluid diet for the first week after the operation. After that you can introduce normal food. If you develop fever or worsening chest pain you should contact your doctor straight away or come to the Emergency Department (A&E), as it may indicate a complication from the surgery. You should take two weeks off work to recover. If you are well at this point, you can resume all normal activities.

**Will I have a follow-up appointment?**
A follow-up appointment with the surgeon or clinical nurse specialist will be made for about six weeks after discharge. The main purpose will be to discuss the success of the operation and whether any reflux symptoms have developed. If the operation has failed to improve your swallowing, we can discuss whether any of the other treatments for achalasia should be considered. Sometimes we also arrange another outpatient gastroscopy. There are no stitches to be removed.

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**Contact us**
If you have any questions or concerns about POEM, please contact the benign upper GI clinical nurse specialist on **t:** 020 7188 2673, or the surgeon’s secretary on **t:** 020 7188 6475 (Monday to Friday, 9am to 5pm). Out of hours, please contact the surgical registrar on call.

Call the hospital switchboard on **t:** 020 7188 7188 and ask for the bleep desk. Ask for bleep 0810 and wait for a response. This will connect you to the surgical registrar on call directly.

In case of an emergency, please go to your local emergency (A&E) department.

For more information leaflets on conditions, procedures, treatments and services offered at our hospitals, please visit [w: www.guysandstthomas.nhs.uk/leaflets](http://www.guysandstthomas.nhs.uk/leaflets)
Pharmacy Medicines Helpline
If you have any questions or concerns about your medicines, please speak to the staff caring for you or call our helpline.
t: 020 7188 8748, Monday to Friday, 9am-5pm

Your comments and concerns
For advice, support or to raise a concern, contact our Patient Advice and Liaison Service (PALS). To make a complaint, contact the complaints department.
t: 020 7188 8801 (PALS)  e: pals@gstt.nhs.uk
t: 020 7188 3514 (complaints)  e: complaints2@gstt.nhs.uk

Language and accessible support services
If you need an interpreter or information about your care in a different language or format, please get in touch.
t: 020 7188 8815  e: languagesupport@gstt.nhs.uk

NHS 111
Offers medical help and advice from fully trained advisers supported by experienced nurses and paramedics. Available over the phone 24 hours a day.
t: 111  w: 111.nhs.uk

NHS website
Online information and guidance on all aspects of health and healthcare, to help you take control of your health and wellbeing.
w: www.nhs.uk

Get involved and have your say: become a member of the Trust
Members of Guy’s and St Thomas’ NHS Foundation Trust contribute to the organisation on a voluntary basis. We count on them for feedback, local knowledge and support. Membership is free and it is up to you how much you get involved. To find out more, please get in touch.
t: 0800 731 0319  e: members@gstt.nhs.uk  w: www.guysandstthomas.nhs.uk/membership

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We want to make sure the information you receive is helpful to you. If you have any comments about this leaflet, we would be happy to hear from you, fill in our simple online form, w: www.guysandstthomas.nhs.uk/leaflets, or e: patientinformationteam@gstt.nhs.uk