

# Peroral endoscopic myotomy (POEM)

## Information for patients attending King's College Hospital only

This information leaflet answers some of the questions you may have about having a peroral endoscopic myotomy (POEM). It explains the risks and the benefits of the procedure and what you can expect when you come to hospital. If you have any more questions, please do not hesitate to contact a member of staff.

### Endoscopy Unit

Denmark Hill Nurses' Station	020 3299 4079
Denmark Hill Reception	020 3299 3075

### Confirming your identity

Before you have a treatment or procedure, our staff will ask you your name and date of birth and check your ID band. If you do not have an ID band we will also ask you to confirm your address. If we do not ask these questions, then please ask us to check. Ensuring your safety is our primary concern.

## What is peroral endoscopic myotomy (POEM)?

POEM is a procedure we use to cut the muscles in your oesophagus (food pipe) which are not working properly and making it hard for you to eat and swallow.

The procedure is done entirely through endoscopy. This means you have no skin wounds or stitches as there would be after a surgical procedure.

It is similar to having a gastroscopy. A long, thin flexible tube called an endoscope is passed into your mouth and down into your stomach. The endoscope is thinner than your little finger and has a camera in its tip which sends pictures of the inside of your stomach and intestine to a video screen.

The endoscopist will then make a 1cm cut in the inner layer of the oesophagus (food pipe) wall using the electro-surgical 'knife' and seal it with temporary clips after the procedure, so there are no holes or breaks in the lining.

They then make a 'tunnel' under the inner lining of the oesophagus, so the muscles can be cut lengthways, right down to the sphincter and a little way beyond, into the stomach. This cut means that symptoms such as chest pain can also improve after POEM.

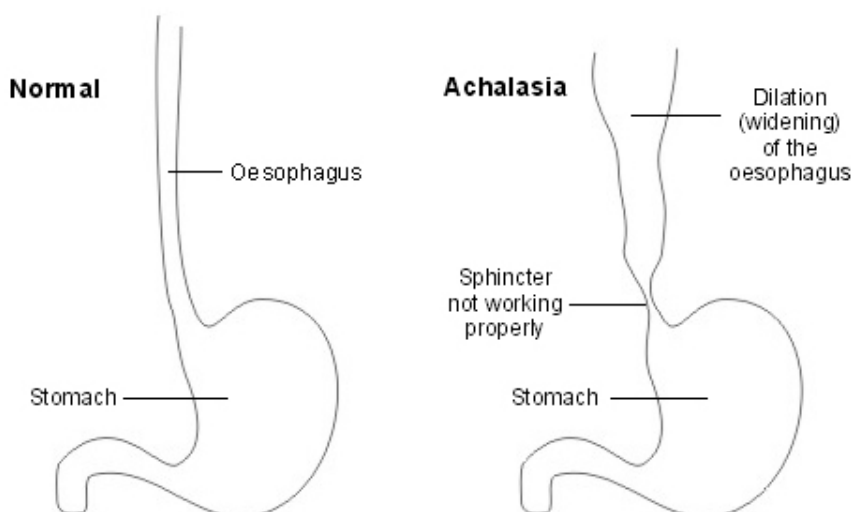
You have the procedure under a general anaesthetic (GA) so you will be asleep. This is an inpatient procedure, so you will stay in hospital for 48 hours afterwards.

## Why do I need this procedure?

You have a condition called achalasia, where the ring of muscle (sphincter) at the bottom of your food pipe is overactive. The ring becomes bulkier and does not open normally so it is hard for food to pass through easily.

Achalasia also affects the two layers of muscles that run along the length of your oesophagus (longitudinal) and run around it in rings (circular) and which push food down into your stomach.

You may feel like food is sticking in your chest and it can often be painful.



## What are the benefits?

This procedure will help the muscles in your oesophagus to relax.

The procedure is done entirely through endoscopy. This means you have no skin wounds or stitches as there would be after a surgical procedure.

## Consent

We must by law obtain your written consent to any procedures beforehand. Staff will explain all the risks, benefits and alternatives before they ask you to sign a consent form. If you are unsure about any aspect of the treatment proposed, please do not hesitate to ask to speak with a senior member of staff.

## What are the risks?

A POEM is a safe procedure and serious complications are very rare.

- **Bleeding** – you may have bleeding during the procedure. This will be controlled immediately by using the electrosurgical knife to cauterise the blood vessels. Usually you lose only a few millilitres of blood.
- **Perforation** – there is a 1 to 2 in 100 risk of making a perforation (hole) in your oesophagus wall. This is a potentially serious complication but it can usually be treated immediately by using the same clips that are used to close the initial cut. We take every care to avoid perforation, but if it happens you will need to stay in hospital longer than planned and be observed. You may also need x-ray tests.
- **Infection** – this is extremely rare. We spray liquid antibiotics along the inside of your oesophagus wall during the procedure to prevent this.
- **Failure of the procedure** – there is a risk that your procedure will fail. But if it is done correctly, this is unlikely to happen. Even after two years, 90% of patients report that they are still well. POEM works better for some symptoms and types of achalasia than others. Success also depends on what type of treatment you have had before. But most people are better off after the procedure. Your doctor will let you know how successful POEM is likely to be for you before you have the procedure.
- **Carbon dioxide gas escape** – we use carbon dioxide gas during the procedure to inflate your oesophagus so we can get a good view of the muscles being cut. Some gas will escape out of your oesophagus into the chest. This has no long-lasting ill effects, but you may have pain and a crackling sensation in your chest skin after the procedure. If gas does escape, we will let you know so you know why you are getting this feeling.
- **Sore throat** – Your throat may be sore for a day or two after the procedure. This is not serious and will get better.
- **Dislodged teeth, crowns or bridgework** – There is a small chance that loose teeth, crowns or bridgework can be dislodged during the procedure. If you have any of these, please inform the anaesthetist beforehand.
- **Reactions to the GA** – these are very rare. The anaesthetist giving you the GA will discuss this with you before the procedure.

We will observe you very closely after the procedure for the following symptoms. If you have anything like this in the first week after having the POEM, when you have gone home, let us know straight away using the contact numbers on the front of this leaflet.

- swallowing problems
- vomiting
- severe chest or tummy pain
- swollen abdomen (tummy)
- fever (high temperature).

## Are there any alternatives?

You can have laparoscopic (keyhole) surgery but this is not always the best option for achalasia. We will discuss the possibility of surgery with you if we have not already done so.

Achalasia can also be treated using a balloon to stretch your oesophagus. This is also done using endoscopy. It can work but is not permanent. If you have had keyhole surgery or balloon stretches for achalasia before, you can still have POEM.

### **Where will I have the procedure?**

You will have the procedure in one of the main operating theatres or the Endoscopy Unit. We will make sure that you have a hospital bed for two nights (48 hours) after the procedure. You will be taken to the main theatre reception area or Endoscopy Unit from this bed. In some cases, we may arrange for you to be admitted the evening before your procedure.

### **Do I need any tests before the POEM?**

You have already had tests such as gastroscopy, barium swallow and manometry. These show us which type of achalasia you have and how much muscle needs to be cut during the POEM.

The doctors who are going to do the procedure will see you in the outpatient clinic beforehand. They will explain what they plan to do and you will be able to talk to them about any aspect of the procedure.

### **Do I need to prepare for the procedure?**

We need to get a clear view of your oesophagus, so your stomach must be empty.

- **You must have liquids only and no solid food for 72 hours before your procedure date.**
- **You must not eat or drink anything (nil by mouth) from midnight the night before your procedure.**

Suitable liquids include clear broth and soup, icepops, tea or coffee with milk and nutritional supplements. Please avoid any kind of meat as well as rough/tough vegetables as they are hard to digest.

### **Do I need to stop taking my medication?**

If you take warfarin, aspirin or clopidogrel, please ring the Endoscopy Unit Nurses' Station for advice on **020 3299 4079** at least one week before your test. You may need to stop taking these before your test, but we need to make sure you do so safely.

If you are diabetic please read our advice sheet, *Preparing for your OGD – information for patients with diabetes*, which also covers what you should do about your medication if you are having a POEM. If you have not received it, please ring Endoscopy Unit Reception on **020 3299 3075** and we will send you a copy.

If you are taking any other medications, in general you can take these as usual, unless your doctor has advised you otherwise.

### **What happens before the procedure?**

We will ask you to change into a hospital gown and take you to the preparation area in a wheelchair or on hospital trolley. The doctor doing the procedure will meet you on the day and go through the consent process with you. You will also meet the anaesthetist who will give you the GA before the procedure.

A nurse or doctor will put a cannula into your arm or hand. This is a very thin plastic tube through which they can inject the anaesthetic. You will be taken into the procedure room lying on the trolley.

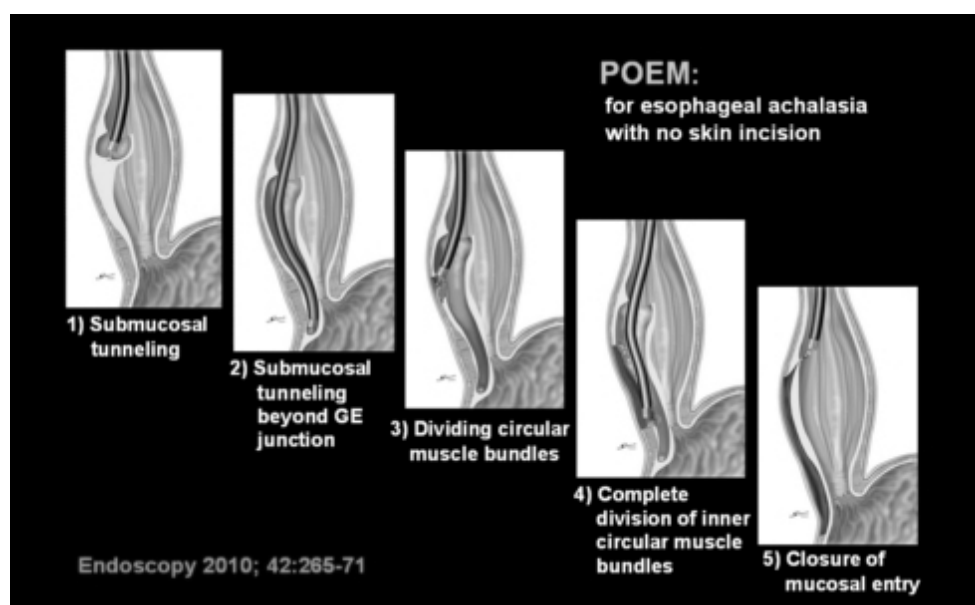
You will be given oxygen to breathe through a mask before you are given the GA. A nurse will attach a monitor to your finger to measure your oxygen levels during the procedure.

The anaesthetist will start giving you the GA once you are in position and have been attached to the monitoring leads. You will also have a tube to help you breathe under anaesthetic.

### **What happens during the procedure?**

The doctor will push the endoscope into your oesophagus through your mouth. They will make a 1cm cut in the inner layer of the oesophagus wall using the electro-surgical 'knife' and seal it with temporary clips after the procedure, so there are no holes or breaks in the lining.

They then make a 'tunnel' under the inner lining of the oesophagus, so the muscles can be cut lengthways, right down to the sphincter and a little way beyond, into the stomach. This cut means that symptoms such as chest pain can also improve after POEM.



### **How long does the procedure take?**

It usually takes about 60 –90 minutes. If your muscles are thick and bulky, it can take a bit longer.

### **What happens after the procedure?**

You will be observed in the theatre recovery area for a few hours after the procedure.

A nurse will take your pulse and blood pressure every 30 minutes. You will then be taken back to the ward to continue recovery.

You will not be able to eat at all for the first 24 hours after the procedure. This is to ensure that the first cut in the lining of your oesophagus has time to heal and that any swelling inside you caused by your procedure has gone down. We will give you fluids, medication to reduce the amount of acid in your stomach and painkillers through the cannula that was put in before your procedure.

The day after the POEM, you will have a barium swallow (x-ray) test and another endoscopy to check your oesophagus lining.

As long as these tests are ok, you will be allowed to have liquids: first water, then thicker fluids and soups.

We usually observe you for one more night in hospital. If all goes well, we will discharge you the day after you started drinking fluids (48 hours after the procedure).

Sometimes we can discharge you from hospital the same day, so you stay in only one night. But this happens only if we are sure that everything has gone well.

## When can I start eating normally again?

It is important that you keep to the following instructions to ensure you get the best possible results from your procedure.

- **Week one:** in the first week, you can have **liquids only** – nothing thicker than tomato soup
- **Week two:** in the second week, you can start eating **pureed food**.
- **Week three:** in the third week you can start eating a **normal diet**.

## Who can I contact with queries and concerns?

If you have any questions about POEM, before or after your procedure, 9am – 5pm, Monday to Friday, call:

- Dr Hayee's secretary, tel **020 3299 6044**
- Mr Haji's secretary, tel: **020 3299 3268**

At all other times, if you have concerns after your procedure, please call your GP (home doctor) or local Emergency Department (A&E). If you need to do this, insist that they contact Dr Hayee or Mr Haji via King's switchboard on **020 3299 9000**. POEM is a highly specialist procedure and needs specialist input at all stages. We will also give you an emergency contact number.

## Sharing your information

We have teamed up with Guy's and St Thomas' Hospitals in a partnership known as King's Health Partners Academic Health Sciences Centre. We are working together to give our patients the best possible care, so you might find we invite you for appointments at Guy's or St Thomas'. To make sure everyone you meet always has the most up-to-date information about your health, we may share information about you between hospitals.

## Care provided by students

We provide clinical training where our students get practical experience by treating patients. Please tell your doctor or nurse if you do not want students to be involved in your care. Your treatment will not be affected by your decision.

## PALS

The Patient Advice and Liaison Service (PALS) offers support, information and assistance to patients, relatives and visitors. They can also provide help and advice if you have a concern or complaint that staff have not been able to resolve for you. The PALS office is on the ground floor of the Hambleton Wing, near the main entrance on Bessemer Road – staff will be happy to direct you.

PALS at King's College Hospital, Denmark Hill, London SE5 9RS

Tel: **020 3299 3601**

Email: **kch-tr.palsdh@nhs.net**

You can also contact us by using our online form at [www.kch.nhs.uk/contact/pals](http://www.kch.nhs.uk/contact/pals)

**If you would like the information in this leaflet in a different language or format, please contact PALS on 020 3299 1844.**