

Risks of POEM

General Anaesthesia:

- Stroke (rare)
- Heart attack (rare)
- Death (very rare)

Procedural:

- Gastric reflux (uncommon)
- Perforation (rare)
- Bleeding (rare)
- Injury to surrounding structures (rare)

What to Expect

After the procedure, you will be admitted for observation and you will have to fast for the first night.

You will be placed on a liquid diet initially with gradual progression towards a normal diet.

Surgical Specialists Centre

NUH Medical Centre, Zone B, Level 15, 15a
Email: surgical_specialists_centre@nuhs.edu.sg

University Surgical Centre

Kent Ridge Wing, Zone D, Level 5, D05-02
Email: usc@nuhs.edu.sg

Appointment Line: (65) 6772 2002

Opening Hours:

Monday to Friday: 8:30am - 5:30pm
Closed on Sat, Sun & Public Holidays



Nearest MRT Station: Kent Ridge (Circle Line)

National University Hospital
5 Lower Kent Ridge Road Singapore 119074
Tel: (65) 6779 5555 Fax: (65) 6779 5678
Website: www.nuh.com.sg
Company Registration No. 198500843R

Information is correct at time of printing (October 2021) and subject to revision without prior notice. The information provided in this publication is meant purely for educational purposes and may not be used as a substitute for medical diagnosis or treatment. You should seek the advice of your doctor or a qualified healthcare provider before starting any treatment or if you have any questions related to your health, physical fitness or medical conditions.

Copyright (2021). National University Hospital. All rights reserved. No part of this publication may be reproduced without permission in writing from National University Hospital.



Peroral Endoscopic Myotomy (POEM)

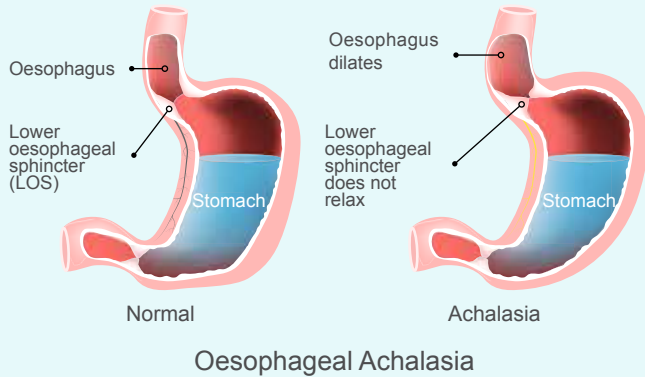


What is Achalasia?

The oesophagus is a muscular tube which transmits food into the stomach. When food passes from the lower end of the oesophagus into the stomach, it encounters a muscular ring known as the lower oesophageal sphincter (LOS). The LOS relaxes to allow food into the stomach and tightens to prevent the reflux of food and acid back into the oesophagus.

Individuals with achalasia have 2 primary abnormalities:

1. Tight LOS
2. Absent peristalsis (contraction) of the oesophagus

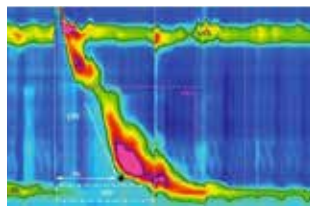


Common Symptoms

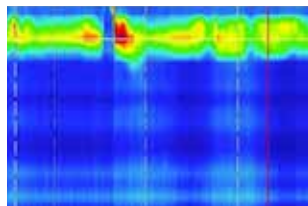
- Difficulty swallowing
- Food regurgitation
- Coughing at night
- Chest pain
- Weight loss

Tests and Procedures

- Endoscopy
- Barium meal
- High-resolution manometry (HRM)



HRM (normal)



HRM (achalasia)

Treatment Options



Balloon getting inserted

Balloon Dilatation

A balloon is inserted into the LOS under endoscopic guidance. Upon inflation of the balloon, the force will tear the LOS muscle fibres and consequently reduce the LOS pressure. This procedure may need to be repeated if there is a relapse of symptoms.

Laparoscopic Myotomy

The LOS muscle fibres are divided under direct vision via keyhole surgery. This procedure has excellent long-term outcomes and has also been the treatment of choice for the last decade. It is performed under general anaesthesia



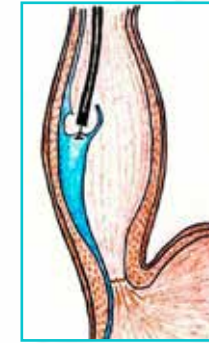
Myotomy

Peroral Endoscopic Myotomy (POEM)

POEM is the next generation treatment modality for achalasia. It is performed endoscopically, with the aid of a high resolution endoscope and requires no external surgical incisions. Similar to laparoscopic myotomy, it is done with the aim to relax the LOS in order to allow food to pass through.

POEM is now a popular treatment for achalasia with good outcomes and low risks.

Peroral Endoscopic Myotomy (POEM)



Mucosal incision toward submucosal space

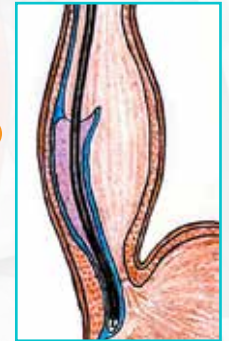
Step 1

An endoscope is placed in the oesophagus.

Under direct vision, a small cut is made in the lining of the oesophagus.

Step 2

Through the small cut, the endoscope is tunneled to the level of the oesophageal sphincter.



Creation of submucosal tunnel



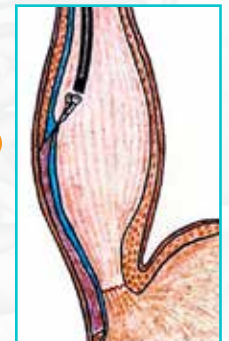
Myotomy

Step 3

The sphincter muscle is then cut, without penetrating the outer layer. This allows the sphincter to relax.

Step 4

The defect in the oesophageal lining is closed with surgical clips.



Closure of mucosal entry