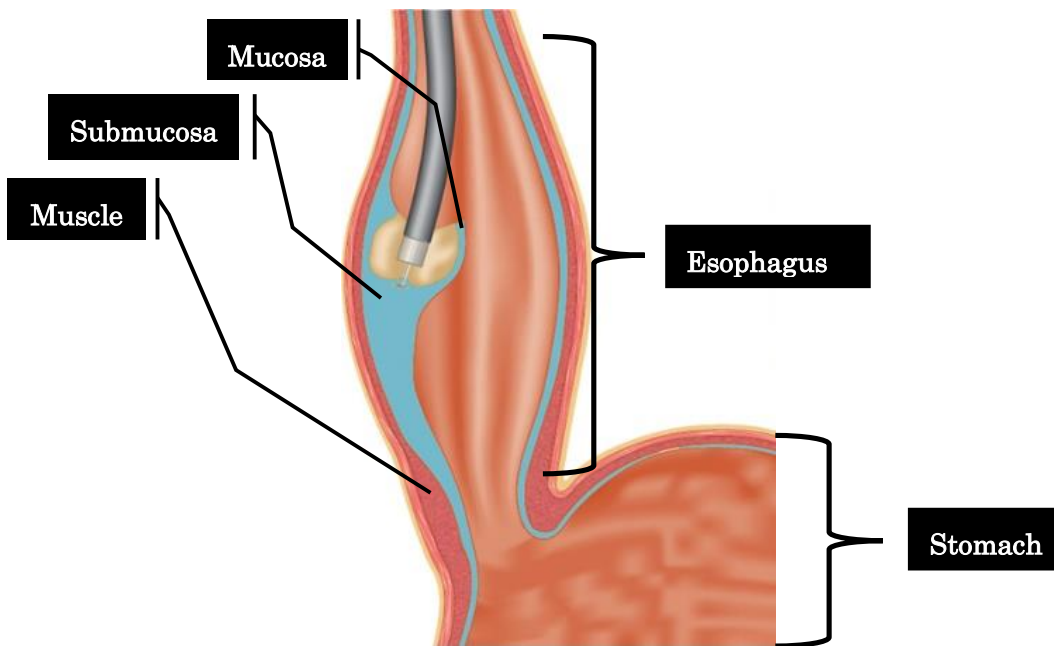


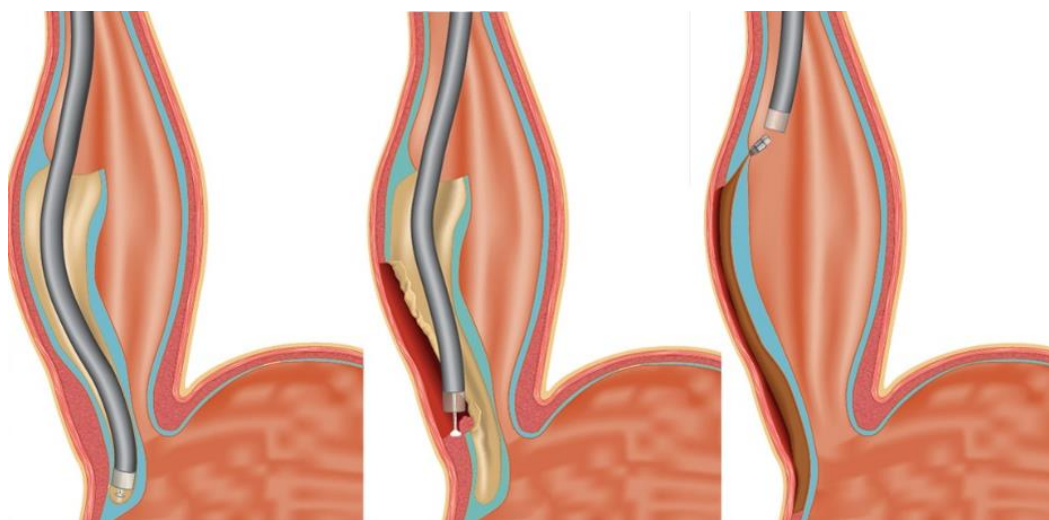
**Peroral Endoscopic Myotomy for Achalasia and Spastic
Esophageal Motility Disorders**

The POEM Procedure

1. An endoscopy of the upper gastrointestinal tract will be performed to suction out any residual debris and to aid in determining the length of the required muscle layer incision (myotomy).
2. The esophagus is composed of two main component: the “skin” lining the inside (mucosa) and the muscle layers. After injection of a saline solution under the mucosa, a “submucosal tunnel” is created to allow the endoscope enter under the mucosa and gain access to the muscle.
3. After the tunnel is completed, the circular muscle myotomy is performed.
4. After the myotomy is completed, an antibiotic solution is instilled into the tunnel and the entry site is closed with clips.



Start of Submucosal Tunnel



Completed Tunnel

Myotomy

Closure with clips

Common Questions about POEM

Who is eligible for POEM?

- The procedure was initially performed for Achalasia, however it is now also used to successfully treat patients with other spastic esophageal disorders such as Diffuse esophageal spasm and Jackhammer esophagus

What is the advantage of POEM over current conventional treatment?

- POEM is an “incision-less” procedure leaving no scars as it is performed from within the esophagus.
- It offers quicker recovery time than the standard surgical procedure
- Allows for more flexibility procedurally allowing easier performance in more complex and difficult cases

Who can perform the POEM procedure?

- Highly trained Gastroenterologist or Surgeons

Do we have this procedure available in Canada?

- Yes. Currently, there are a handful of centers in North America that perform POEM
- There are currently two North American physicians that have completed a formal one year training fellowship in Japan with the pioneer (Haruhiro Inoue) of POEM. One of which is a Gastroenterologist at Queens University in Kingston Ontario and the other is a surgeon in Cleveland Ohio.

Common Questions and answers for patients considering POEM

What are the common adverse events?

- Excessive gas (carbon dioxide from insufflation) in the abdominal cavity requiring decompression (managed during POEM using a small needle to decompress the abdomen without clinical consequences). A perforation (hole) in the mucosa of the esophagus (can be closed with the tiny clips used to close the entry site, again without clinical consequence).

What are the potentially serious adverse events?

- There have been few case reports of serious *adverse events* which include; serious infections, bleeding requiring transfusion and aspiration pneumonia.

How effective is the procedure?

- The procedure is effective in over 90% of patients in relieving the symptoms of achalasia

I've had surgery/treatment before for achalasia, can I still have this procedure?

- Yes. POEM has been performed successfully with excellent results in patients with achalasia that have had previous surgical and endoscopic treatments (Heller myotomy, balloon dilation and Botox injection)

When can I eat after the procedure?

- After the procedure you cannot have anything to eat or drink on the same day. The following day you will have another exam of your esophagus (endoscopy) and an X-ray. Once this are confirmed to be normal, you will start on liquids. Generally, you will resume a normal diet in 4 days.

What can I expect to feel after the procedure?

- You may experience chest soreness or discomfort after the procedure which is normal and is a result of cutting the abnormal muscle. This will subside within 2-3 days. Also, it's not uncommon to have a fever within the first 24-48 hours, this will also resolve within 1-2 days and is a result of the inflammatory response to the procedure.

How long will I be in the hospital?

- The length of stay will vary, but is generally 2-4 days.