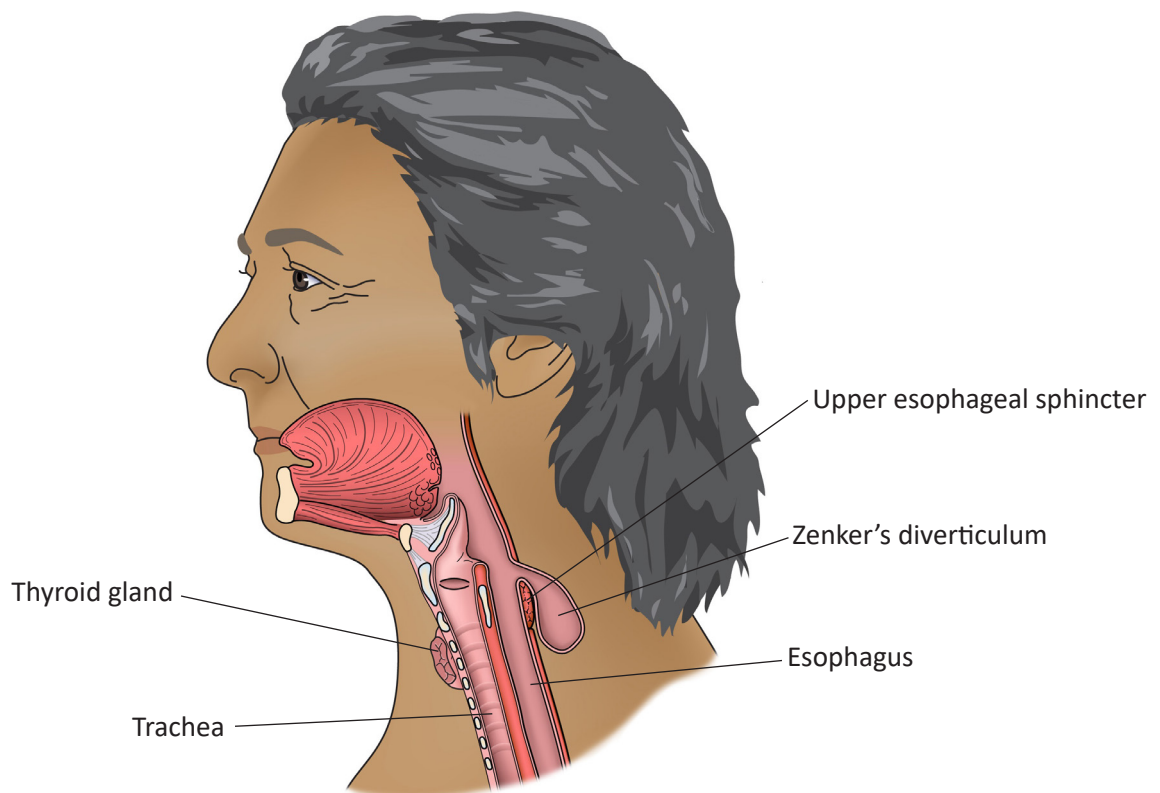


## Zenker's Peroral Endoscopic Myotomy

Zenker's peroral endoscopic myotomy (Z-POEM) is a procedure used to treat people with Zenker's diverticulum. A diverticulum is an abnormal out-pouching or pocket that forms off the gastrointestinal wall. A Zenker's diverticulum is a pouch that forms in the throat at the start of the digestive tract, just above the upper esophageal sphincter (UES).

**Figure 1. Zenker's diverticulum**



### Causes of Zenker's diverticulum

An abnormal tightening of the upper esophageal sphincter (also called the cricopharyngeus muscle) can cause a Zenker's diverticulum. When the sphincter muscle tightens, pressure builds along the wall of the throat above this muscle. If there is a weak point in the throat wall right above this muscle, swallowing can put added pressure on this weak area. This may cause a diverticulum to form. Because the UES below the pouch is tighter than normal, it is harder to pass food and liquids into the esophagus. As a result, food and liquid tend to pass into the diverticulum or back up into the throat (regurgitation).

## Symptoms of Zenker's diverticulum

People with Zenker's diverticulum may have these symptoms:

- Trouble swallowing
- Feeling like swallowed material is sticking in the throat
- Regurgitation
- Weight loss
- Bad breath
- Coughing
- Choking

Swallowed material may collect in the diverticulum. It can be regurgitated long after eating a meal. Pills may be difficult to swallow. Some people with a Zenker's diverticulum may have only mild symptoms. Over time the pouch continues to grow and symptoms may become worse.

## Diagnosing Zenker's diverticulum

The physician will diagnose Zenker's diverticulum by doing an upper endoscopy (EGD), an esophagram (barium swallow) or a modified barium swallow study (video fluoroscopic swallow study). These tests are done when the physician is trying to determine the source of the swallowing problem.

## Treatment for Zenker's diverticulum

The goals for the treatment of Zenker's diverticulum are to:

- Relieve the obstruction caused by the tight UES
- Remove the passageway for swallowed materials to the diverticulum
- Stop swallowed material from collecting in the diverticulum

In the past, large or complex diverticulum required surgery through an incision in the neck to remove the diverticulum sac (Zenker's diverticulectomy). But now, surgeons can treat many patients with symptomatic Zenker's diverticulum with a minimally invasive endoscopic procedure such as Z-POEM. This is done through a tube placed down the esophagus. In this procedure, the surgeon will use the endoscope to cut the tight UES muscle and part of the wall between the esophagus and the pouch. This relieves the obstruction. This procedure changes the anatomy of the esophagus around the diverticulum so that swallowed material easily passes from the diverticulum into the esophagus.

If you have any questions, please ask your physician.