## **Achalasia**

#### What is Achalasia?

Achalasia is a rare but chronic disorder that affects the esophagus, the muscular tube responsible for transporting food from the mouth to the stomach. In individuals with achalasia, the lower esophageal sphincter (LES) fails to relax properly, causing difficulty in food passage and leading to various uncomfortable symptoms.

### What Are The Symptoms?

The primary symptom of achalasia is dysphagia, which is difficulty swallowing food and liquids. This difficulty worsens over time, making eating and drinking typically challenging. Individuals may also experience regurgitation, where swallowed food returns to the mouth, leading to a bitter or sour taste. Some may have chest pain or discomfort during and after eating. Weight loss may occur over time due to difficulty swallowing. While heartburn is less common, some individuals may experience it as well.

#### What Causes Achalasia?

Despite extensive research, the cause of Achalasia isn't completely understood. It's generally thought to be a consequence of damage or deterioration of certain nerve cells in the esophagus, the tube connecting your throat to your stomach.

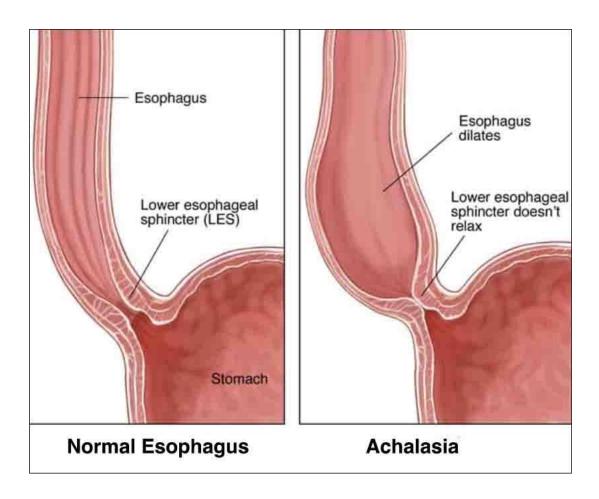
The esophagus has a specialized network of nerves known as the myenteric plexus. These nerves play a crucial role in controlling the rhythmic muscle movements that are essential for swallowing. When you eat, these muscles contract in a coordinated manner, a process known as peristalsis, to move food down the esophagus and into the stomach.

In achalasia, these nerve cells in the myenteric plexus are believed to undergo some form of damage or degeneration. This leads to two significant problems.

First, the loss of peristalsis, meaning that the coordinated muscle contractions that help move food down the esophagus are disrupted. This makes swallowing difficult and can lead to food getting stuck in the esophagus.

The second issue involves the Lower Esophageal Sphincter (LES), a muscular ring at the lower end of the esophagus that acts like a door, opening to let food pass into the stomach and closing to prevent stomach acids from flowing back into the esophagus. In a healthy esophagus, the LES relaxes during swallowing to allow food to pass. However, in achalasia, the LES fails to relax properly, further complicating the swallowing process.

The combination of these two problems - the weakened esophageal peristalsis and the spastic LES - results in the dilation, or widening, of the esophagus. This can cause many symptoms, including difficulty swallowing, chest pain, and regurgitation of food and liquids.



#### How is Achalasia Diagnosed?

Diagnosing achalasia involves a combination of medical history, physical examination, and specific tests. A barium swallow study, also known as an esophagram, is conducted where patients swallow a liquid containing barium and a contrast material. X-rays are taken to visualize the esophagus and detect its shape and function abnormalities. Esophageal manometry measures the pressure and muscle contractions in the esophagus, evaluating the function of the LES and the esophageal muscles. Endoscopy involves the insertion of a thin, flexible tube with a camera (endoscope) into the esophagus to examine its lining and rule out other potential causes of symptoms.

#### What About Treatment?

The goal of achalasia treatment is to alleviate symptoms, improve esophageal function, and enhance the passage of food into the stomach. Treatment options depend on the severity of the

condition. Certain *medications*, such as calcium channel blockers or nitrates, may be prescribed in mild cases to help relax the LES and improve swallowing. Pneumatic or balloon *dilation* involves inserting a deflated balloon into the LES and inflating it to stretch and widen the narrowed passage. *Botulinum toxin* injection can help relax the sphincter and improve swallowing. In more severe cases, surgical options may be considered. *Laparoscopic Heller myotomy* is a surgical procedure that involves cutting the muscle fibers of the LES to facilitate easier food passage. *Peroral endoscopic myotomy (POEM)* is a less invasive procedure performed endoscopically, where a tunnel is created within the esophageal lining, and the LES muscles are cut to achieve the same effect as Heller myotomy.

## **Complications**

Without appropriate treatment, achalasia can lead to several potential complications. The esophagus may become dilated over time due to the pressure of retained food, leading to the development of a "megaesophagus." Food and liquid that are regurgitated may accidentally enter the airways, causing aspiration pneumonia. Persistent swallowing difficulties can lead to weight loss and malnutrition due to inadequate food intake.

In conclusion, achalasia is a chronic disorder that affects the esophagus, causing difficulty in swallowing and regurgitation of food. If you experience symptoms suggestive of achalasia, such as difficulty swallowing or regurgitation, seeking medical evaluation and diagnosis is crucial. Treatment options, including medications, dilation procedures, and surgical interventions, can effectively manage symptoms and improve the quality of life for individuals with achalasia. Early diagnosis and appropriate management can help prevent complications and ensure a better prognosis.

# **Center For Digestive Health & Nutrition**

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