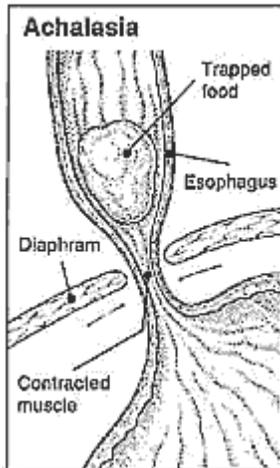


ACHALASIA



Achalasia is a motor disorder of the esophagus characterized by complete loss of peristalsis. The exact cause of achalasia is unknown; several theories exist regarding loss of nerve endings or loss of hormones. Approximately 2 people per 200,000 per year will be diagnosed with this illness. The symptoms are somewhat similar to GERD, thus patients may be treated for reflux before the diagnosis of achalasia is made. These odd maneuvers such as putting their arms above their heads to get food to go down), heartburn, regurgitation, and chest pain. Most patients will experience weight loss, and some may present with complications such as inhalation of debris from their esophagus.

The diagnosis of achalasia may be suspected by barium xray or by endoscopy. **Barium studies** will show a dilated esophagus down to a "bird beak" at the level of the LES. Upper endoscopy is performed to exclude cancer as a cause of blockage. The primary diagnosis, however, is based on the lack of peristalsis documented on manometry. **Manometry** may also show a failure of the LES to relax with swallowing.

Since there is currently no treatment for the loss of peristalsis, treatment focuses on removing the resistance of the LES. **Medications** which lower LES pressure include nitroglycerin, Isordil, nifedipine, Verapamil and others. These medications will help about 70% of patients, but the effect is short term. Small dilators may be used to help with difficulty swallowing but last only months. Currently, the mainstays of treatment are surgery or dilatation with large dilators although some physicians choose to relax the LES using injection of botulism toxin.

Dilatation of the LES seems to work better for patients over age 45. A good response occurs in 60-95% of patients. Duration of effect may extend to 10 years. The dilatation may be repeated, but the efficacy drops by ½ each time it is performed. The main complication of dilatation is tearing too far through the muscle (perforation) and occurs in approximately 2%. **Surgery** is a strong consideration for all patients but especially those less than age 45. Surgery may be performed in a traditional style, by thoracoscopy, or by laparoscopy. The surgery is performed to cut the muscle fibers that make up the LES. Good results from surgery can be expected in 90% of patients. Reflux is the most common problem encountered after surgery; this has led many surgeons to also perform an anti-reflux surgery at the same time.

Because of the risk of tearing with dilatation and the risks and discomforts of surgery, physicians have searched for other means of treatment. Botox or botulinum toxin has been used for many years by Ophthalmologists and Neurologists to treat muscles spasms. Gastroenterologists began using this several years ago to treat achalasia. In this treatment, endoscopy is performed to inject a small amount of the **Botox** into the esophagus at the level of the LES. This too has been shown in one study to be more effective in older individuals. The success rate for improving dysphagia is about 60% (82% if >50 yr old) at 6 months. In Vigorous achalasia 100% effective. Currently studies are underway to see if guiding the Botox into the muscle by use of ultrasound has a higher or longer success rate. Many physicians feel that this should not be used in young individuals or healthy older ones since how long it will last is unknown (up to 12-18 mos.) and repeat studies of manometry and esophageal emptying do not improve as much as the difficulty swallowing does. The complications of Botox treatment are reflux in a small percentage, rare flu-like symptoms, and the risks of endoscopy. The amount of botulinum toxin injected is not enough to cause paralysis elsewhere in the body.

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