



Achalasia

TREATMENT

Oral Medications

Oral medications (capsules or pills) to relax the esophageal sphincter are taken before each meal. This allows more food to pass into the stomach. This treatment is temporary and may not provide significant relief of symptoms. Side effects such as headache, low blood pressure and pedal edema (swollen feet) are common. Oral medications are recommended only for patients who are in the very early stages of the disease, are not candidates for surgery, or who have not received relief with botulinum toxin injections.

Botulinum Toxin (Botox™) Injections

Botulinum toxin (Botox™) is injected directly into the esophageal sphincter during endoscopic surgery. The toxin weakens the sphincter muscle, which allows food to pass into the stomach. Botulinum toxin injections are effective for many people, but they must be repeated every few months. This treatment is usually reserved for elderly patients or patients who are at high surgical risk.

Botox™ was developed from the toxin causing botulism, a form of food poisoning. However, botulism is not a concern with the very low doses used as treatment for achalasia. No one has ever developed botulism from this treatment.

Pneumatic (Balloon) Dilatation

A balloon is inserted into the esophagus to stretch the esophageal sphincter. A local anesthetic is used to numb the throat and medication is given intravenously (into a vein) to help the patient relax. This procedure is successful 50 to 80 percent of the time and does not require hospitalization. If balloon dilatation is successful, its benefits are usually permanent. However, a small number of people may need repeat treatment if the esophageal sphincter contracts.

There is a risk (4 to 5 percent) of esophageal tearing during the procedure. If a tear occurs, emergency surgery is performed to repair the tear.

Surgery

Surgery to cut the esophageal sphincter muscle (esophagomyotomy) is most frequently done by laparoscopy. This operation is called a Heller Myotomy and it lasts about two hours. During the procedure, a laparoscope (a telescopelike instrument) and operating instruments are inserted through several small slits made in the abdomen. Through the laparoscope, the esophageal sphincter muscle is cut. This procedure usually requires one to two days in the hospital. Conventional surgery through an incision into the chest or abdomen to cut the sphincter muscle requires up to one week in the hospital.

Surgery (either laparoscopic or conventional) to cut the esophageal sphincter muscle is successful about 90 percent of the time. If the surgery is successful, the benefits are usually permanent. However, a small number of people may need repeat treatment if the esophageal sphincter contracts.

An additional procedure to wrap the upper stomach around the lower esophagus to prevent reflux of stomach content into the esophagus is sometimes done at the same time that the esophageal sphincter muscle is cut.

If performed by experienced surgeons, laparoscopic (minimally invasive) esophagomyotomy is as safe as "open" surgery. Mayo Clinic has one of the largest and most experienced minimally invasive surgery practices in the United States. The minimally invasive surgery practices in all three Mayo Clinic locations promote research and training on new applications. In any given year, Mayo Clinic physicians perform approximately 30,000 minimally invasive, endoscopic procedures in state-of-the-art facilities.

In some cases, minimally invasive esophagomyotomies can be done with the assistance of a robot. Mayo Clinic in Minnesota and in Arizona have been using robotic surgical techniques for some time. With robotic surgery, a computer

translates the surgeon's natural hand and wrist movements that are made on a control console to instruments that have been placed inside the patient through small incisions.

Using a robot can enhance human capability. The robotic appendages — pencil-sized arms with pincer-like digits attached by "wrists" — are designed to mimic, and even surpass, the movements of a surgeon's forearm and wrist, allowing surgeons a finer degree of precision. By the same token, the endoscope, acting essentially as the "eyes" during surgery, providing the ability to zoom in and out, plus high-definition, full-color, magnified, 3-D images.

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