

Diffuse Esophageal Spasm

The esophagus is a muscular tube that connects the mouth to the stomach. During swallowing, it contracts in a coordinated way to move food or liquid to the stomach.

Diffuse esophageal spasm causes the esophagus to contract in an uncoordinated way. As a result, what is swallowed is not pushed down into the stomach.

Symptoms

Between 80 to 90 percent of the people with this condition have chest pain. The pain often starts or worsens when eating or drinking very hot foods or liquids, and it may feel similar to the pain of a heart attack.

Other symptoms include difficulty swallowing and more than half of patients with this condition experience the feeling of food getting stuck inside the center of the chest. Patients may also feel a burning sensation in the center of the chest (heartburn).

Causes and Risk Factors

Diffuse esophageal spasms can be caused by disruptions or damage to the nerves that coordinate the muscles of the esophagus. In some cases, this condition can lead to [achalasia](#).

Diagnosis

This condition can be diagnosed using:

- A [barium swallow](#). X-rays taken of the esophagus while the patient swallows barium show an uncoordinated esophagus that sometimes looks like a corkscrew. Uncoordinated contractions may keep the barium from moving to the stomach.
- Esophageal manometry. This test identifies when the muscles are tightening (contracting) without being coordinated.
- Upper GI endoscopy is almost always performed if a patient describes food sticking in the esophagus after swallowing. This process involves putting a flexible tube with a tiny camera down the individual's throat so that the doctor can see inside the esophagus. This procedure can help detect tumors, unusual masses or scars.

Treatment

Treatment options include:

- Botulinum toxin (BoTox®). Botulinum toxin is a poison produced by the bacteria that cause botulism. During upper GI endoscopy, a small amount of this substance can be injected into the muscle does not relax to block the function of nerves that make the muscle contract. This procedure may need to be repeated.
- Drugs to relax the muscles. While medications can help some patients, they are not effective overall.
- Peppermint oil. A small amount mixed in water makes the muscles of the esophagus contract normally again.
- Surgery to cut the muscles along the lower esophagus. This procedure is usually performed only in serious cases that do not respond to other therapy

