CONDITION

Esophageal spasm

Esophageal spasm causes abnormal muscle contractions that can make swallowing painful or difficult.

WHAT IT IS
Abnormal, poorly coordinated muscle contractions in the esophagus

BODY SYSTEM
Digestive system

MAIN SYMPTOMS
Chest pain, trouble swallowing, regurgitation, food sticking

WHAT CAUSES IT
Usually unknown; reflux or opioids may contribute

HOW IT IS DIAGNOSED
High-resolution esophageal manometry after other causes are excluded

MAIN TREATMENT
Trigger management, medicines, and procedures for severe symptoms

CAN IT BE CURED?
Sometimes - symptoms can resolve or respond

IS IT AN EMERGENCY?
Sometimes - new severe chest pain needs emergency assessment

LONG-TERM OUTLOOK
Symptoms often manageable but may recur over years

Overview

Esophageal spasm is a condition in which the muscles of the esophagus contract abnormally. The esophagus is the tube that carries food and liquids from your mouth to your stomach.

Normally, its muscles squeeze in a smooth, coordinated wave. With esophageal spasm, contractions may happen too early, be unusually forceful, or fail to move food normally. This can cause chest pain or make swallowing difficult.

"Esophageal spasm" is sometimes used for more than one movement problem. Distal esophageal spasm causes premature contractions in the lower esophagus. Hypercontractile esophagus, sometimes called jackhammer esophagus, causes contractions that are coordinated but excessively strong. These patterns are identified using a pressure test called esophageal manometry.

Symptoms can resemble acid reflux, a narrowing of the esophagus, or a heart problem. For this reason, testing usually focuses both on confirming abnormal contractions and ruling out other causes.

Symptoms

Symptoms may come and go. Some people have brief episodes, while others have symptoms that last longer or return over months or years.

Common symptoms include:

Chest pain can be intense and may spread to the back, neck, jaw, or arms. Because heart pain can feel similar, new or unexplained chest pain should not automatically be blamed on the esophagus.

Very hot or cold drinks, eating quickly, or particular foods may bring on symptoms for some people. Stress may make pain or swallowing symptoms feel worse, but this does not mean the condition is imagined or caused only by anxiety.

Heartburn can occur at the same time, especially if you also have gastroesophageal reflux disease, or GERD. However, heartburn alone does not confirm an esophageal spasm.

- Chest pain or squeezing behind the breastbone
- Trouble swallowing liquids, solid food, or both
- A feeling that food is stuck in the chest
- Food or liquid coming back up, called regurgitation

Causes and risk factors

The exact cause is often unknown. The nerves that coordinate swallowing and the esophageal muscles may not work together normally.

Acid reflux may contribute to symptoms in some people, although it is not always clear whether reflux causes the abnormal contractions. Inflammation, scarring, or a physical blockage can also produce similar symptoms and must be considered during testing.

Opioid pain medicines can affect the movement of the esophagus. Long-term use may cause manometry patterns that resemble spasm or difficulty relaxing the lower esophageal muscle. Do not stop an opioid like oxycodone or morphine suddenly without medical guidance, since withdrawal and uncontrolled pain can result.

Esophageal movement disorders are diagnosed more often in middle-aged and older adults, but symptoms can occur at other ages. Anxiety does not directly cause the condition, although stress and heightened sensitivity to pain may influence how symptoms are experienced.

Diagnosis

The first step is usually a careful review of your swallowing symptoms, chest pain, medicines, and medical history. Chest pain may need a heart assessment before testing focuses on the esophagus.

An upper endoscopy is commonly used when swallowing is difficult. During this procedure, a flexible camera is passed through the mouth while you are sedated. It allows the esophagus to be checked for inflammation, tumors, rings, scarring, or food that has become stuck. Small tissue samples may be taken to look for conditions such as eosinophilic esophagitis, an allergic type of inflammation.

A barium swallow may also be used. You drink a liquid that shows up on X-rays while images record how it moves through the esophagus. This can reveal narrowing, delayed emptying, or a twisting pattern sometimes associated with spasm. A normal barium study does not rule it out.

High-resolution esophageal manometry is the main test used to confirm abnormal contractions. A thin pressure-sensing tube is passed through the nose into the esophagus. You then swallow small amounts of liquid while the test measures the timing and strength of muscle contractions.

Manometry also helps distinguish esophageal spasm from achalasia, a different condition in which the lower esophageal muscle does not relax properly. A diagnosis should be based on both relevant symptoms and a clear manometry pattern. An abnormal pattern found by chance may not explain symptoms.

In selected cases, a test called EndoFLIP may provide additional information about how the lower esophagus opens and contracts. It is usually performed during sedated endoscopy and supports, rather than replaces, other testing.

Treatment and management

Treatment is based on how often symptoms occur, how much they affect eating or daily life, and what testing shows. Mild or occasional symptoms may need only monitoring and practical changes.

It can help to eat slowly, take smaller bites, chew thoroughly, and drink fluids with meals if this

makes swallowing easier. Some people benefit from avoiding foods or drinks that repeatedly trigger episodes. A short symptom diary can help identify personal triggers without unnecessarily restricting your diet.

If reflux is present, treatment may reduce irritation and related symptoms. This may include lifestyle measures or acid-suppressing medicine. Treating reflux does not always stop abnormal contractions.

Medicines that relax smooth muscle, such as calcium channel blockers or nitrates, may reduce squeezing in some people. Their benefit is not consistent, and they can cause headaches, dizziness, or low blood pressure. Peppermint oil is sometimes tried, but evidence is limited and it may worsen reflux.

When chest pain is linked partly to sensitive esophageal nerves, a low-dose medicine that changes pain signalling may be considered. Some of these medicines are also used as antidepressants like sertraline or fluoxetine , but in this setting they are intended to reduce pain sensitivity.

If an opioid may be contributing, the clinician who manages that medicine can review the benefits and risks. Any reduction should be planned rather than abrupt.

Procedures are usually reserved for persistent, severe symptoms that have been confirmed by testing. Botulinum toxin injections can temporarily relax esophageal muscle, but improvement may not last. Stretching the esophagus is mainly useful when there is a narrowing and is not a reliable treatment for spasm alone.

A procedure called peroral endoscopic myotomy, or POEM, cuts selected esophageal muscle fibres through an endoscope. Surgical myotomy works on the same general principle. These options may help carefully selected people with severe symptoms, but they carry risks, including reflux, bleeding, infection, or a tear in the esophagus. Long-term evidence is more limited than it is for treating achalasia.

Complications

Esophageal spasm is not cancer and is not known to turn into cancer. It does not usually damage other organs or shorten life.

Frequent swallowing difficulty can lead to avoiding food, weight loss, or dehydration. Food may occasionally become stuck and require urgent removal. Regurgitated material can sometimes enter the airway, particularly if symptoms are severe or occur while lying down.

Treatment can also cause complications. Muscle-relaxing medicines may lower blood pressure, while myotomy procedures can make acid reflux more likely.

Progressively worsening symptoms may point to another condition rather than uncomplicated spasm. They should be reassessed.

Prevention

There is no proven way to prevent primary esophageal spasm because its underlying cause is usually unknown.

Eating slowly and avoiding personal triggers may reduce episodes, but these steps do not prevent the condition itself. Treating reflux can help when reflux contributes to symptoms, though it may not change the abnormal contraction pattern.

If opioid medicine is involved, a supervised medicine review may help. Do not change or stop prescribed opioids on your own.

Living with it and what to expect

The course is different from person to person. Symptoms may be intermittent, settle for long periods, or return during certain meals or stressful periods. A manometry pattern does not always predict how severe future symptoms will be.

Many people manage the condition with eating adjustments, treatment of reflux, or medicine used during troublesome periods. A smaller group has persistent symptoms that interfere with nutrition or daily activities and may be considered for a procedure.

Routine follow-up is useful if symptoms remain frequent, medicines cause side effects, or eating habits have changed. New or steadily worsening trouble swallowing may require repeat assessment because narrowing, inflammation, achalasia, and other conditions can develop or become more apparent over time.

Keeping track of which foods are difficult, whether liquids are affected, and how often food sticks can make follow-up more useful. Avoid cutting out large food groups unless there is a clear reason, since unnecessary restriction can make adequate nutrition harder.

When to get medical help

Seek emergency help for new, severe, or unexplained chest pain, especially if it occurs with shortness of breath, sweating, nausea, faintness, or pain spreading to the jaw or arm. Heart problems cannot be safely distinguished from esophageal pain based on symptoms alone.

Get urgent medical help if:

Arrange a prompt medical assessment for swallowing difficulty that is getting worse, repeated food sticking, unplanned weight loss, ongoing vomiting, anemia, or persistent chest pain.

Routine follow-up is appropriate for reviewing recurring symptoms, nutrition, trigger patterns, medicine effects, and whether treatment is helping.

- Food is stuck and you cannot swallow liquids or saliva
- You are drooling because you cannot swallow
- Swallowing trouble is affecting your breathing
- You vomit blood or pass black, tar-like stool

Common questions

Is esophageal spasm the same as acid reflux?

No. Reflux is the backward movement of stomach contents into the esophagus. Esophageal spasm involves abnormal muscle contractions. The two conditions can occur together, and reflux may trigger symptoms in some people.

Can esophageal spasm feel like a heart attack?

Yes. Both can cause squeezing chest pain that may spread beyond the chest. If pain is new, severe, or accompanied by sweating, breathlessness, nausea, or faintness, seek emergency help rather than assuming it is a spasm.

What foods trigger esophageal spasms?

There is no single trigger diet. Very hot or cold drinks, alcohol, or particular foods may trigger symptoms in some people, but not everyone. A brief food and symptom diary can help identify a repeatable pattern.

Does anxiety cause esophageal spasm?

Anxiety is not considered a proven cause. Stress can increase muscle tension, change swallowing, and make chest pain more noticeable. Treating stress may reduce the burden of symptoms, but it does not mean the symptoms are psychological.

Can esophageal spasm go away?

Symptoms sometimes settle or disappear, but they may also return. Treatment often focuses on reducing pain and swallowing difficulty. Procedures can provide longer-lasting relief for selected people, but no treatment guarantees that symptoms will never recur.

Is esophageal spasm dangerous?

The condition itself is usually not dangerous, but its symptoms can resemble urgent heart problems. Severe swallowing difficulty can also cause food impaction, dehydration, or weight loss. New chest pain and an inability to swallow saliva need urgent assessment.

Sources

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