CONDITION

Esophageal cancer

Esophageal cancer is cancer that begins in the tube carrying food from the throat to the stomach.

WHAT IT IS
Cancer arising in the food pipe

BODY SYSTEM
Digestive system

MAIN SYMPTOMS
Difficulty swallowing, weight loss, chest pain, persistent indigestion

WHAT CAUSES IT
DNA changes; exact cause often unknown

HOW IT IS DIAGNOSED
Upper endoscopy with tissue biopsy

MAIN TREATMENT
Surgery, chemotherapy, radiotherapy, immunotherapy, or targeted therapy

CAN IT BE CURED?
Sometimes - especially when found before spreading

IS IT AN EMERGENCY?
Sometimes - blocked swallowing, breathing trouble, or major bleeding

LONG-TERM OUTLOOK
Better when found early; advanced cancer is harder to control

Overview

Esophageal cancer begins in the esophagus, the muscular tube that carries food and drink from your throat to your stomach. It develops when cells in the lining of the esophagus grow out of control.

The two main types are:

These types have different risk factors and may be treated differently.

Esophageal cancer matters because a growing tumor can narrow the esophagus and make swallowing difficult. It can also spread into nearby tissues, lymph nodes, or more distant organs. Finding it before it has spread generally creates more treatment options, but early cancer does not always cause clear symptoms.

Many noncancerous conditions can cause swallowing problems, heartburn, or chest discomfort. Symptoms alone cannot show whether cancer is present.

- Adenocarcinoma , which usually begins in gland-forming cells near the lower end of the esophagus
- Squamous cell carcinoma , which begins in the flat cells lining the esophagus and can occur anywhere along it

Symptoms

Difficulty swallowing, called dysphagia , is one of the most common symptoms. It may begin with solid foods such as bread or meat. If the narrowing increases, softer foods and liquids may also become difficult to swallow.

Other possible symptoms include:

Anemia means there are too few healthy red blood cells, sometimes because of slow bleeding from the tumor.

These symptoms are not proof of esophageal cancer. Reflux, inflammation, muscle problems, and noncancerous narrowing can cause similar changes. New or worsening difficulty swallowing should still be assessed promptly.

- Food feeling stuck in the throat or chest
- Pain when swallowing
- Unplanned weight loss
- Persistent indigestion or worsening heartburn
- Pressure, burning, or pain behind the breastbone
- Ongoing cough or hoarse voice
- Bringing food back up after swallowing
- Vomiting, including vomiting blood
- Tiredness, weakness, or breathlessness caused by anemia

Causes and risk factors

Esophageal cancer develops after DNA changes allow cells to grow abnormally. The exact reason these changes happen is often unknown.

Risk factors differ between the two main types. Having a risk factor does not mean you will develop cancer, and some people have no known risk factors.

Tobacco and heavy alcohol use are major risk factors for squamous cell carcinoma. Using both together raises the risk more than either one alone. Risk also increases with certain conditions that damage or narrow the esophagus, including achalasia. Achalasia is a disorder in which the lower esophagus does not move food normally or relax properly.

Adenocarcinoma is associated with long-term acid reflux and Barrett's esophagus . In Barrett's esophagus, repeated reflux has changed the cells lining the lower esophagus. Most people with reflux or Barrett's esophagus do not develop cancer.

Other factors linked with adenocarcinoma include excess body weight and smoking. Risk for both main types rises with age and is higher in men, although anyone can be affected.

Rare inherited syndromes can raise the risk, but most esophageal cancers are not caused by an inherited gene change.

Diagnosis

An upper endoscopy is the main test used to investigate suspected esophageal cancer. During this procedure, a thin flexible tube with a camera is passed through your mouth and into the esophagus. Sedation is usually given to help you remain comfortable.

If an abnormal area is found, small tissue samples are removed. This is called a biopsy . A pathologist examines the samples under a microscope. A biopsy is needed to confirm the diagnosis and identify the cancer type.

If cancer is confirmed, further tests show how far it has grown or spread. This process is called staging. Tests may include:

Cancer may also be tested for features such as HER2, PD-L1, or mismatch repair changes. These are biological markers that can help determine whether certain targeted medicines or immunotherapies may be useful.

- CT scans of the chest and abdomen
- PET-CT, which looks for areas of active cancer
- Endoscopic ultrasound, which shows how deeply a tumor has entered the esophageal wall
- Bronchoscopy for some tumors near the airway
- Laparoscopy, a small-camera operation, in selected cases near the stomach

Treatment and management

Treatment is based on the cancer type, its location and stage, your general health, and what matters to you. Care is usually planned by a team that includes cancer specialists, surgeons, dietitians, and other support professionals.

Very early cancers limited to the inner lining may sometimes be removed during an endoscopy. Treatment may also be used to destroy remaining abnormal lining, especially when cancer develops within Barrett's esophagus.

For cancer that can be removed surgically, treatment may include an esophagectomy . This operation removes part or most of the esophagus and reconnects the remaining esophagus to the stomach or, less often, part of the bowel. Chemotherapy, radiotherapy, or both may be given before surgery. Some treatment plans include chemotherapy before and after surgery.

Chemotherapy uses medicines that damage cancer cells. Radiotherapy uses focused high-energy radiation. Chemoradiotherapy combines the two and may be the main treatment when surgery is not suitable. It is also commonly used for some squamous cell cancers.

When cancer has spread to distant parts of the body, treatment usually focuses on slowing its growth, easing symptoms, and helping you maintain your quality of life. Options can include chemotherapy, immunotherapy, targeted therapy, or combinations of these. Tumor testing helps guide some of these choices.

Swallowing problems need active support. Options may include radiotherapy, stretching a narrowed area, or placing an expandable tube called a stent to keep the esophagus open. A feeding tube may be recommended when eating cannot provide enough nutrition.

Treatment can affect appetite, weight, swallowing, and digestion. A dietitian can help you find foods and textures that are easier to manage. Palliative care can also help with pain, nausea, fatigue, eating difficulties, and emotional stress at any stage of cancer care.

Complications

A tumor may narrow or block the esophagus, leading to dehydration, weight loss, and malnutrition. Food or liquid may enter the airway, known as aspiration, which can cause coughing or a chest infection.

Bleeding may be slow and cause anemia, or it may be more obvious. Rarely, a connection called a fistula can form between the esophagus and the airway.

Esophageal cancer can spread to lymph nodes or organs such as the liver, lungs, or bones. The symptoms then depend on where it has spread.

Treatment can also cause complications. Surgery may lead to leaks, infections, reflux, changes in eating, or narrowing at the surgical connection. Chemotherapy and radiotherapy may cause fatigue, nausea, lowered blood counts, or painful swallowing. Your care team can often prevent, reduce, or treat many of these effects.

Prevention

Esophageal cancer cannot always be prevented. Age, chance DNA changes, and some medical or inherited conditions cannot be changed.

Not smoking is one of the clearest ways to lower risk. If you smoke, stopping is beneficial even after many years. Limiting alcohol also lowers the risk of squamous cell carcinoma, especially for people who smoke.

Maintaining a weight that is healthy for you may reduce the risk of adenocarcinoma. Regular movement and a balanced eating pattern can support this goal.

Long-term reflux should be assessed and managed for symptom control and to check for complications. Reflux treatment has not been proven to prevent every case of esophageal cancer. If you have Barrett's esophagus, you may be offered regular endoscopy based on your individual risk and previous test results. Routine screening is not used for everyone.

Living with it and what to expect

The course of esophageal cancer is different for each person. Early cancer may be treated with the aim of removing or destroying it completely. Follow-up is still important because cancer can return and treatment can cause lasting changes.

After an esophagectomy, the stomach is smaller or sits higher in the chest. You may need smaller, more frequent meals. Reflux, early fullness, weight changes, diarrhea, or light-headedness after eating can occur. These problems may improve over time, but some people need long-term changes to how and when they eat.

Recovery after surgery or chemoradiotherapy often takes months rather than days. Energy may return gradually. Rehabilitation, nutrition support, and careful symptom management can help you return to everyday activities.

Follow-up may include appointments, blood tests, scans, or endoscopy. The schedule is based on your treatment and symptoms. Tell your care team about new swallowing difficulty, persistent pain, ongoing weight loss, or reduced ability to eat rather than waiting for a routine visit.

Advanced esophageal cancer is usually managed as a long-term serious condition rather than cured. Treatment may control it for a period, but it can eventually stop responding. Plans can change over time to balance cancer control with side effects and quality of life.

Practical and emotional support are part of care. You may want help with work, finances, transport, eating in social settings, or discussing the illness with people close to you.

When to get medical help

Arrange a prompt medical assessment if you develop new difficulty swallowing, food repeatedly feels stuck, or swallowing is becoming harder. You should also seek assessment for unexplained weight loss, ongoing vomiting, persistent chest discomfort, worsening indigestion, or a hoarse voice that does not settle.

Contact your cancer team promptly if known esophageal cancer or its treatment is causing reduced food or fluid intake, increasing pain, fever, repeated vomiting, or new shortness of breath. These symptoms should not wait for routine follow-up.

Seek emergency help if:

- You cannot swallow saliva or fluids
- Food is stuck and is affecting breathing
- You vomit a large amount of blood
- You pass black stools and feel faint, weak, or breathless
- You develop severe chest pain or sudden breathing difficulty

Common questions

Is esophageal cancer curable?

Sometimes. Cancer limited to the esophagus or nearby tissues may be treated with the aim of cure. Cancer that has spread to distant organs is usually not curable, but treatment may slow it, ease symptoms, and support quality of life.

What are the first signs of esophageal cancer?

The first noticeable sign is often difficulty swallowing solid food. Unplanned weight loss, painful swallowing, persistent indigestion, or chest discomfort may also occur. Early cancer can cause no symptoms.

How quickly does esophageal cancer grow?

There is no single timeline. Growth rates differ by cancer type, tumor biology, and stage. Staging scans and changes seen during treatment provide more useful information than a general estimate.

Does acid reflux cause esophageal cancer?

Most people with reflux never develop esophageal cancer. Long-term reflux can lead to Barrett's esophagus, which increases the risk of adenocarcinoma. New swallowing problems should not be assumed to be ordinary reflux.

Can I still eat if I have esophageal cancer?

Many people can continue eating, although food texture and meal size may need to change. Soft or liquid foods, nutrition drinks, treatment to open the esophagus, or a feeding tube may be needed if swallowing becomes difficult.

Does esophageal cancer run in families?

Most cases are not inherited. Rare genetic syndromes can raise the risk, and family history may matter in some situations. A genetics assessment may be considered when the personal or family history suggests an inherited cause.

Sources

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