

## **Esophageal Cancer - Diagnosis** [1]

This section has been reviewed and approved by the [Cancer.Net Editorial Board](#) [2], 11/2014

**ON THIS PAGE:** You will find a list of the common tests, procedures, and scans that doctors can use to find out what's wrong and identify the cause of the problem. To see other pages, use the menu on the side of your screen.

Doctors use many tests to diagnose cancer and find out if it has spread to another part of the body, called metastasis. Some tests may also determine which treatments may be the most effective. For most types of cancer, a biopsy is the only way to make a definitive diagnosis of cancer. If a biopsy is not possible, the doctor may suggest other tests that will help make a diagnosis. Imaging tests may be used to find out whether the cancer has spread. This list describes options for diagnosing this type of cancer, and not all tests listed will be used for every person. Your doctor may consider these factors when choosing a diagnostic test:

- Age and medical condition
- Type of cancer suspected
- Signs and symptoms
- Previous test results

In addition to a physical examination, the following tests may be used to diagnose esophageal cancer:

**Barium swallow, also called an esophagram.** The patient swallows a liquid containing barium and then a series of x-rays, which are pictures of the inside of the body, are taken. Barium coats the surface of the esophagus, making a tumor or other unusual changes easier to see on the x-ray. If there is an abnormal finding, your doctor may recommend an upper endoscopy and biopsy to find out if it is cancerous (see below).

**Upper endoscopy** [3], also called **esophagus-gastric-duodenoscopy, or EGD.** This test allows the doctor to see the lining of the esophagus. A thin, flexible tube with a light and video camera on the end, called an endoscope, is passed down the throat and into the esophagus while the patient is sedated. Sedation is giving medication to become more relaxed, calm, or sleepy. If there is an abnormal finding, a biopsy will be performed to find out if it is cancerous. An endoscopy using an inflatable balloon to stretch the esophagus can also help widen the blocked area so that food can pass through until treatment begins.

**Endoscopic ultrasound** [4]. This procedure is often done at the same time as the upper endoscopy. During an ultrasound, sound waves provide a picture of the wall of the esophagus and nearby lymph nodes and structures. During an endoscopic ultrasound, an endoscopic probe with an attached ultrasound that produces the sound waves is inserted into the esophagus through the mouth. The ultrasound is used to find out if the tumor has grown into the wall of the esophagus, how deep the tumor has grown, and whether cancer has spread to the lymph nodes or other nearby structures. An ultrasound can also be used to help get a tissue sample from the lymph nodes.

**Bronchoscopy** [4]. Similar to an upper endoscopy, the doctor passes a thin, flexible tube with a light on the end into the mouth or nose, down through the windpipe, and into the breathing passages of the lungs. A bronchoscopy may be performed if a patient's tumor is located in the upper two-thirds of the esophagus to find out if the tumor is growing into the person's airway, including the trachea, or windpipe, and the area where the windpipe branches out into the lungs called the bronchial tree.

**Biopsy** [5]. Other tests can suggest that cancer is present, but only a biopsy can make a definite diagnosis. A biopsy is the removal of a small amount of tissue from the suspicious area for examination. The tissue sample removed during the biopsy is analyzed by a pathologist. A pathologist is a doctor who specializes in interpreting laboratory tests and evaluating cells, tissues, and organs to diagnose disease.

**Molecular testing of the tumor.** Your doctor may recommend running laboratory tests on a tumor sample to identify specific genes, proteins, and other factors unique to the tumor. Results of these tests will help decide whether your treatment options include a type of treatment called targeted therapy (see [Treatment Options](#) [6]).

**Computed tomography (CT or CAT) scan** [7]. A CT scan creates a three-dimensional picture of the inside of the body with an x-ray machine. A computer then combines these images into a detailed, cross-sectional view that shows any abnormalities or tumors. A CT scan can also be used to measure the tumor's size. Usually, a special dye called a contrast medium is given before the scan to provide better detail. This dye is generally injected into a patient's vein.

**Magnetic resonance imaging (MRI)** [8]. An MRI uses magnetic fields, not x-rays, to produce detailed images of the body. MRI can also be used to measure the tumor's size. A contrast medium is usually injected into a patient's vein to create a clearer picture.

**Positron emission tomography (PET) scan** [9]. A PET scan is a way to create pictures of organs and tissues inside the body. A small amount of a radioactive sugar substance is injected into the patient's body. This sugar substance is taken up by cells that use the most energy. Because cancer tends to use energy actively, it absorbs more of the radioactive substance. A scanner then detects this substance to produce images of the inside of the body.

After diagnostic tests are done, your doctor will review all of the results with you. If the diagnosis is cancer, these results also help the doctor describe the cancer; this is called staging.

*The next section helps explain the different stages and grades for this type of cancer. Use the menu on the side of your screen to select Stages and Grades, or you can select another section, to continue reading this guide.*

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**Links:**

- [1] <http://www.cancer.net/cancer-types/esophageal-cancer/diagnosis>
- [2] <http://www.cancer.net/about-us>
- [3] <http://www.cancer.net/node/24731>
- [4] <http://www.cancer.net/node/24511>
- [5] <http://www.cancer.net/node/24406>
- [6] <http://www.cancer.net/node/18790>
- [7] <http://www.cancer.net/node/24486>
- [8] <http://www.cancer.net/node/24578>
- [9] <http://www.cancer.net/node/24648>