

ESOPHAGEAL CANCER SYMPTOMS AND CAUSES, DIAGNOSIS AND TREATMENT METHOD

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Abstract. Esophageal cancer is cancer that develops in the esophagus, which is the long, hollow tube that runs from the throat to the stomach. The esophagus helps the body move ingested food from the back of the throat to the stomach for digestion. Esophageal cancer usually begins in the cells that line the esophagus. Esophageal cancer can develop anywhere in the esophagus. Men are more sensitive than women. Esophageal cancer is the sixth leading cause of cancer death worldwide. Incidence rates vary in different regions. Esophageal cancer is more common in some areas, possibly due to smoking and alcohol consumption, as well as specific dietary habits and obesity.

Key words: Esophagus, cancer, tube, adenocarcinoma, squamous cell, endoscopy, stent, abnormal, Barrett's esophagus, biopsy, operation, radiation, smoking, pressure, pain.

Purpose of research. The purpose of our research is to study the causes, symptoms, diagnosis and treatment methods of esophageal cancer.

Test methods and materials. The cause of esophageal cancer is unknown. Esophageal cancer can develop when there are changes (mutations) in the DNA of esophageal cells. These changes allow cells to grow and divide uncontrollably. The accumulation of abnormal cells can form a tumor in the esophagus, which can grow and invade nearby structures and spread to other parts of the body.

Signs and Symptoms of Esophageal Cancer:

- difficult to swallow
- unexpected weight loss
- Chest pain, pressure or burning
- indigestion or heart palpitations
- cough or wheezing.

Types of esophageal cancer. Esophageal cancer is classified according to the type of cells involved. Knowing what type of esophageal cancer you have can help determine treatment options. Types of esophageal cancer include:

- adenocarcinoma. Adenocarcinoma begins in the cells of the mucous glands in the esophagus. Adenocarcinoma most often occurs in the lower esophagus. Adenocarcinoma is the most common type of esophageal cancer in the United States and primarily affects white men.
- squamous cell carcinoma. Squamous cells are flat, thin cells that line the surface of the esophagus. Squamous cell carcinoma often occurs in the upper and middle parts of the esophagus. Squamous cell carcinoma is the most common esophageal cancer in the world.

- Other rare species. Some rare types of esophageal cancer include small cell carcinoma, sarcoma, lymphoma, melanoma, and choriocarcinoma.

Risk factors

It is commonly believed that chronic irritation of the esophagus can lead to esophageal cancer.

Factors that can irritate esophageal cells and increase the risk of esophageal cancer include:

- have gastroesophageal reflux disease (GERD).
- smoking
- Precancerous changes in the cells of the esophagus (Barrett's esophagus)
- obesity
- drinking alcohol
- bile reflux
- Difficulty swallowing due to the esophageal sphincter not relaxing (achalasia)
- Chronic habit of drinking hot liquids
- Not eating enough fruits and vegetables
- radiation therapy to the chest or upper abdomen

Diagnosis. Tests and operations used to diagnose esophageal cancer include:

- Check for barium meal. This test involves swallowing a liquid containing barium, followed by X-rays. Barium coats the inside of the esophagus, which shows tissue changes on X-rays.
- Examination of the esophagus with a viewing instrument (endoscopy). During an endoscopy, the doctor passes a tube with a camera lens down your throat and esophagus (video endoscope). Doctors use an endoscope to examine the esophagus to look for cancer or irritation.
- A tissue sample is taken for testing (biopsy). Your doctor may take a sample of suspicious tissue (biopsy) by inserting a special viewing instrument (endoscope) into your throat and esophagus. A tissue sample is sent to a laboratory to test for cancer cells.

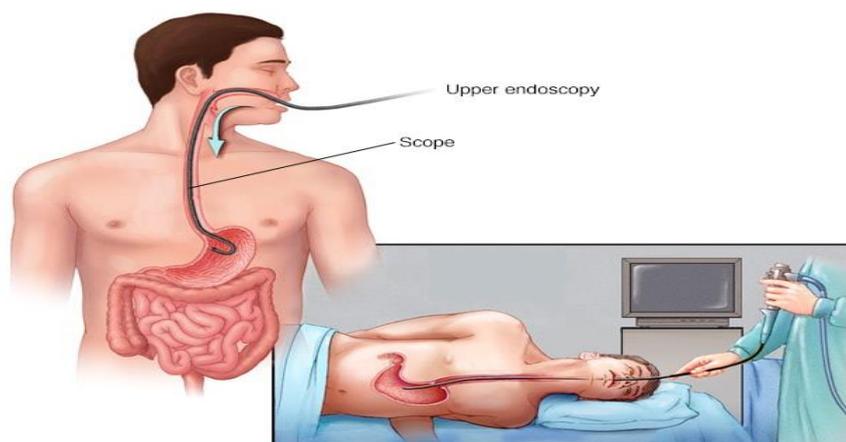


Figure 1. Endoscopy

Treatment. Which esophageal cancer treatment you choose is based on the types of cells involved in your cancer, the stage of the cancer, your general health, and your preferences for treatment.

Treatment of complications Treatment of esophageal obstruction and difficulty swallowing may include:

- Relieves esophageal obstruction. If esophageal cancer narrows the esophagus, the surgeon may use an endoscope and special instruments to place a metal tube (stent) to keep the



esophagus open. Other treatments include surgery, radiation therapy, chemotherapy, laser therapy, and photodynamic therapy.

- Provides nutrition. If you have difficulty swallowing or have had surgery on your esophagus, your doctor may recommend a feeding tube. The esophagus supplies nutrients directly to the stomach or small intestine, allowing the esophagus time to recover after cancer treatment.

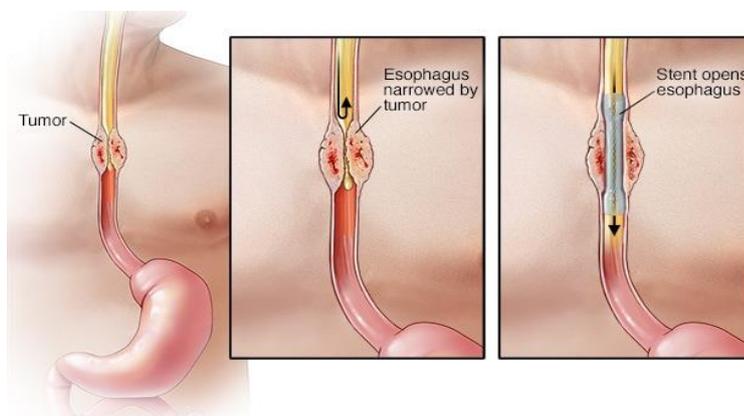


Figure 2. Placing a stent in the esophagus.

Chemotherapy Chemotherapy is drug therapy that uses chemicals to kill cancer cells. Chemotherapy drugs are usually given before surgery (neoadjuvant therapy) or after surgery (adjuvant therapy) in patients with esophageal cancer. In addition, chemotherapy can be used in combination with radiation therapy. For people with advanced cancer that has spread beyond the esophagus, chemotherapy alone may be used to relieve the signs and symptoms caused by the cancer. The side effects of chemotherapy depend on the chemotherapy drugs used.

Radiation therapy. Radiation therapy uses high-energy beams (such as X-rays and protons) to kill cancer cells. Radiation therapy is usually given by a machine outside the body that directs radiation at the cancer site (external beam radiation). Or, less commonly, a radiation source is placed near the cancer site in the body (brachytherapy). Radiation therapy is often combined with chemotherapy to treat patients with esophageal cancer. It is usually used before surgery and sometimes after surgery. Radiation therapy may also be used to treat complications of advanced esophageal cancer, such as when the tumor has grown large enough to prevent food from entering the stomach. Side effects of radiation therapy to the esophagus include sunburn-like skin reactions, pain or difficulty swallowing, and damage to nearby organs such as the lungs and heart.

A combination of chemotherapy and radiation therapy. Combining chemotherapy and radiation therapy can increase the effectiveness of each therapy. A combination of chemotherapy and radiation therapy may be the only treatment you receive, or a combination may be used before surgery. But combining chemotherapy and radiation therapy can increase the likelihood and severity of side effects.

Targeted drug therapy. Targeted drug therapy targets specific weaknesses in cancer cells. Targeted drug therapy blocks the weak spots and kills cancer cells. Targeted drugs are often combined with chemotherapy to treat advanced esophageal cancer or advanced cancer that has not responded to other treatments.

Immunotherapy. Immunotherapy is a drug that helps your immune system fight cancer. The body's disease-fighting immune system may not attack cancer because cancer cells produce proteins that make it harder for immune system cells to recognize cancer cells as dangerous. Immunotherapy works by interfering with this process. Immunotherapy may be used when esophageal cancer has advanced, recurred, or spread to other parts of the body.

Summary. In this article, we talked about the causes and symptoms of esophageal cancer, treatment and preventive measures. You can take steps to reduce your risk of esophageal cancer. For example: quit smoking. If you smoke, ask your doctor how to quit. Medicines and counseling can help you quit smoking. If you drink alcohol, do so in moderation. If you drink alcohol, do so in moderation. Healthy adult women should drink no more than one glass a day, and healthy adults should drink no more than two glasses a day. Eat lots of fruits and vegetables. Add a variety of brightly colored fruits and vegetables to your diet. Maintain a healthy weight. If you are overweight or obese, talk to your doctor about how to lose weight. Work slowly to lose 1 or 2 pounds (0.454 or 0.908 kg) per week.

References:

- 1.Ivashkin Vladimir Trofimovich, Truxmanov Aleksandr Sergeevich, Maev Igor Veniaminovich Nashriyotchi: SHIKO, 2011 yil
- 2.Bagnenko Sergey Fedorovich, Dvoretzkiy Sergey Yuryevich, Sinenchenko Georgiy Ivanovich Muharrir: Sergey Fedorovich Bagnenko 2023 yil
- 3.Koichuev A. A., Gulieva L. A. O'quv yordami 2020-yil
- 4.Choriyeva Zulfiya Yusupovna, Asfandiyorov Javodbek Mirzaali o'g'li, Ximmatov Adashmurod Sobir o'g'li, Mardonov Mirzabek Begzod o'g'li, & Rashidov Abdulaziz Ashurali o'g'li. (2023). ANAFILAKTIK SHOK. Universal Science Research jurnali , 1 (1), 47–50.
- 5.Ташниязов Х. Б., Асфандиёров Ж. М., Ашуров А. Т. ИССЛЕДОВАНИЕ ОСОБЕННОСТИ ЦИТОМОРФОЛОГИИ В КЛЕТКАХ БУККАЛЬНОГО ЭПИТЕЛИЯ КУРЯЩИХ СТУДЕНТОВ ТЕРМЕЗСКОГО ФИЛИАЛА ТАШКЕНТСКОЙ МЕДИЦИНСКОЙ АКАДЕМИИ //International Bulletin of Medical Sciences and Clinical Research. – 2023. – Т. 3. – №. 2. – С. 62-67.
- 6.Ahmedova Saodat Tashboltayevna, Asfandiyorov Javodbek Mirzaali o'g'li, & Avlayeva Sojida G'ayrat qizi. (2023). MAVSUSLI BIOLOGIK BAKTERIAL ICHAK INFEKTSIONLARINI ESHERICHIYA MISABIDA O'rganish. Universal Science Research jurnali , 1 (3), 110–115.

