

Laryngeal Cancer

SANF: BRD Cancer Center

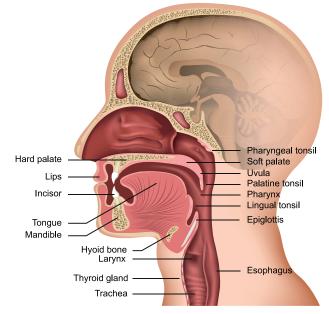
Laryngeal Cancer Is a Disease in Which Malignant (Cancer) Cells Form in the Tissues of the Larynx

The larynx is a part of the throat, between the base of the tongue and the trachea. The larynx contains the vocal cords, which vibrate and make sound when air is directed against them. The sound echoes through the pharynx, mouth, and nose to make a person's voice.

There are three main parts of the larynx:

- **Supraglottis:** The upper part of the larynx above the vocal cords, including the epiglottis.
- **Glottis:** The middle part of the larynx where the vocal cords are located.
- **Subglottis:** The lower part of the larynx between the vocal cords and the trachea (windpipe).

Most laryngeal cancers form in squamous cells, the thin, flat cells lining the inside of the larynx.



Laryngeal Cancer Is a Type of Head and Neck Cancer

Anything that increases your risk of getting a disease is called a risk factor. Having a risk factor does not mean that you will get cancer; not having risk factors doesn't mean that you will not get cancer.

Signs and Symptoms of Laryngeal Cancer Include a Sore Throat and Ear Pain

These and other signs and symptoms may be caused by laryngeal cancer or by other conditions:

- A sore throat or cough that does not go away
- Trouble or pain when swallowing
- Ear pain
- A lump in the neck or throat
- A change or hoarseness in the voice

People With Laryngeal Cavity Cancer Should Have Their Treatment Planned by a Team of Doctors Who Are Expert in Treating Head and Neck Cancer

Depending on the stage of the cancer and treatment needs, a number of health professionals may provide care:

- Head and neck surgeon
- Medical Oncologist
- Radiation oncologist
- Dentist
- Speech therapist

- Dietitian
- Psychologist
- Rehabilitation specialist
- Plastic surgeon

Tests That Examine the Throat and Neck Are Used to Help Detect (Find), Diagnose, and Stage Laryngeal Cancer

The following tests and procedures may be used:

- Physical exam of the throat and neck
- **Biopsy:** The removal of cells or tissues so they can be viewed under a microscope by a pathologist to check for signs of cancer. The sample of tissue may be removed during one of the following procedures:
 - Laryngoscopy: A procedure to look at the larynx (voice box) for abnormal areas. A mirror or a laryngoscope (a thin, tube-like instrument with a light and a lens for viewing) is inserted through the mouth to see the larynx. A special tool on the laryngoscope may be used to remove samples of tissue.
 - Endoscopy: A procedure to look at organs and tissues inside the body, such as the throat, esophagus, and trachea to check for abnormal areas. An endoscope (a thin, lighted tube with a light and a lens for viewing) is inserted through an opening in the body, such as the mouth. A special tool on the endoscope may be used to remove samples of tissue.
- **CT scan (CAT scan):** A procedure that makes a series of detailed pictures of areas inside the body, taken from different angles. The pictures are made by a computer linked to an x-ray machine. A dye may be injected into a vein or swallowed to help the organs or tissues show up more clearly. This procedure is also called computed tomography, computerized tomography, or computerized axial tomography.

- MRI (magnetic resonance imaging): A procedure that uses a magnet, radio waves, and a computer to make a series of detailed pictures of areas inside the body. This procedure is also called nuclear magnetic resonance imaging (NMRI).
- **PET-CT scan:** A procedure that combines the pictures from a positron emission tomography (PET) scan and a computed tomography (CT) scan. The PET and CT scans are done at the same time with the same machine. The combined scans give more detailed pictures of areas inside the body than either scan gives by itself. A PET-CT scan may be used to help diagnose disease, such as cancer, plan treatment, or find out how well treatment is working.
- **Barium swallow:** A series of x-rays of the esophagus and stomach. The patient drinks a liquid that contains barium (a silver-white metallic compound). The liquid coats the esophagus and stomach, and x-rays are taken. This procedure is also called an upper GI series.

Certain Factors Affect Prognosis (Chance of Recovery) and Treatment Options

Prognosis (chance of recovery) depends on the following:

- The stage of the disease.
- The location and size of the tumor.
- The grade of the tumor.
- The patient's age, gender, and general health, including whether the patient is anemic.

Treatment options depend on the following:

- The stage of the disease.
- The location and size of the tumor.
- Keeping the patient's ability to talk, eat, and breathe as normal as possible.
- Whether the cancer has come back (recurred).

Smoking tobacco and drinking alcohol decrease the effectiveness of treatment for laryngeal cancer. Patients with laryngeal cancer who continue to smoke and drink are less likely to be cured and more likely to develop a second tumor. After treatment for laryngeal cancer, frequent and careful follow-up is important.

After Laryngeal Cancer Has Been Diagnosed, Tests Are Done to Find Out if Cancer Cells Have Spread Within the Larynx or to Other Parts of the Body

The process used to find out if cancer has spread within the larynx or to other parts of the body is called staging. The information gathered from the staging process determines the stage of the disease. It is important to know the stage of the disease in order to plan treatment. The results of some of the tests used to diagnose laryngeal cancer are often also used to stage the disease.

There Are Three Ways That Cancer Spreads in the Body

Cancer can spread through tissue, the lymph system, and the blood:

- **Tissue.** The cancer spreads from where it began by growing into nearby areas.
- Lymph system. The cancer spreads from where it began by getting into the lymph system. The cancer travels through the lymph vessels to other parts of the body.
- **Blood.** The cancer spreads from where it began by getting into the blood. The cancer travels through the blood vessels to other parts of the body.

When cancer spreads to another part of the body, it is called metastasis. Cancer cells break away from where they began (the primary tumor) and travel through the lymph system or blood.

The metastatic tumor is the same type of cancer as the primary tumor. For example, if laryngeal cancer spreads to the lung, the cancer cells in the lung are actually laryngeal cancer cells. The disease is metastatic laryngeal cancer, not lung cancer.

The Following Stages Are Used for Laryngeal Cancer

Stage O (Carcinoma in Situ)

In stage 0, abnormal cells are found in the lining of the larynx. These abnormal cells may become cancer and spread into nearby normal tissue. Stage 0 is also called carcinoma in situ.

Stage I (1) - Stage IV (4)

Hypopharyngeal cancer can be staged either Stage I (1) through Stage IV (4), Stage I being the least advanced and Stage IV the most advanced.

There Are Different Types of Treatment for People With Laryngeal Cancer

Different types of treatment are available for people with laryngeal cancer. Some treatments are standard (the currently used treatment), and some are being tested in clinical trials.

Radiation Therapy

Radiation therapy is a cancer treatment that uses high-energy x-rays or other types of radiation to kill cancer cells or keep them from growing. The way the radiation therapy is given depends on the type and stage of the cancer being treated.

Radiation therapy may work better in people who have stopped smoking before beginning treatment.

External radiation therapy to the thyroid or the pituitary gland may change the way the thyroid gland works. A blood test to check the thyroid hormone level in the body may be done before and after therapy to make sure the thyroid gland is working properly.

Surgery

Surgery (removing the cancer in an operation) is a common treatment for all stages of laryngeal cancer. The following surgical procedures may be used:

- Cordectomy: Surgery to remove the vocal cords only.
- **Supraglottic laryngectomy:** Surgery to remove the supraglottis only.
- **Hemilaryngectomy:** Surgery to remove half of the larynx (voice box). A hemilaryngectomy saves the voice.
- **Partial laryngectomy:** Surgery to remove part of the larynx (voice box). A partial laryngectomy helps keep your ability to talk.

- **Total laryngectomy:** Surgery to remove the whole larynx. During this operation, a hole is made in the front of the neck to allow you to breathe. The hole is called a tracheal stoma.
- Laser surgery: A surgical procedure that uses a laser beam (a narrow beam of intense light) as a knife to make bloodless cuts in tissue or to remove a surface lesion such as a tumor in the larynx.

After the doctor removes all the cancer that can be seen at the time of the surgery, some people may be given chemotherapy or radiation therapy after surgery to kill any cancer cells that are left. Treatment given after the surgery to lower the risk that the cancer will come back is called adjuvant therapy.

Chemotherapy

Chemotherapy is a cancer treatment that uses drugs to stop the growth of cancer cells, either by killing the cells or by stopping the cells from dividing. When chemotherapy is taken by mouth or injected into a vein or muscle, the drugs enter the bloodstream and can reach cancer cells throughout the body (systemic chemotherapy). The way the chemotherapy is given depends on the type and stage of the cancer being treated.

Targeted Therapy

Targeted therapy is a type of treatment that uses drugs or other substances to attack specific cancer cells. Targeted therapies usually cause less harm to normal cells than chemotherapy or radiation therapy do.

Radiosensitizers

Radiosensitizers are drugs that make tumor cells more sensitive to radiation therapy. Combining radiation therapy with radiosensitizers may kill more tumor cells.

Follow-Up Tests May Be Needed.

Some of the tests that were done to diagnose the cancer or to find out the stage of the cancer may be repeated. Some tests will be repeated in order to see how well the treatment is working. Decisions about whether to continue, change, or stop treatment may be based on the results of these tests.

Support is available for coping with changes that may have happened as a result of cancer treatment. Your healthcare team can offer ideas as well as a plan of care for long-term follow-up.

Clinical Trials

Clinical trials are done to find out if new cancer treatments are safe and effective or better than the standard treatment.

People who take part in a clinical trial may receive:

- The standard drugs alone or
- The standard drugs plus the new treatment being studied

Many of today's standard treatments for cancer are based on earlier clinical trials.

Ask if there is a clinical trial right for you.

Taking part in a clinical trial helps improve the way cancer will be treated in the future. Even when clinical trials do not lead to effective new treatments, they often answer important questions and help move research forward.

Some clinical trials only include people who have not yet received treatment. Other trials test treatments for those whose cancer has not gotten better. There are also clinical trials that test new ways to stop cancer from coming back or reduce the side effects of cancer treatment.

To Learn More About Laryngeal Cancer

American Cancer Society https://www.cancer.org/

National Cancer Institute https://www.cancer.gov/

National Comprehensive Cancer Network Guidelines for Patients https://www.nccn.org/patients/guidelines/cancers.aspx

MedlinePlus https://medlineplus.gov/

Common Questions

What does the pathology report say?

What is the stage of my cancer?

What are my goals for treatment?

What are my treatment choices?

What kind of support services are available for me about finances, emotions, spiritual questions, etc.?

My Health Care Team	Contact Information
Surgeon:	
Medical Oncologist:	
Radiation Oncologist:	
Primary Care Doctor:	
Navigator:	
Nurse:	
Registered Dietitian Nutritionist:	
Other:	
Other:	

Adapted from: Adult Treatment Editorial Board. PDQ Laryngeal Cancer Treatment (Adult).

Notes			

Notes _			

SANF: BRD° Cancer Center