



[cancer.org](https://www.cancer.org) | 1.800.227.2345

# Treating Laryngeal and Hypopharyngeal Cancer

## How are laryngeal and hypopharyngeal cancers treated?

Treatment for laryngeal or hypopharyngeal cancer may include:

- [Surgery for Laryngeal and Hypopharyngeal Cancers](#)
- [Radiation Therapy for Laryngeal and Hypopharyngeal Cancers](#)
- [Chemotherapy for Laryngeal and Hypopharyngeal Cancers](#)
- [Targeted Therapy for Laryngeal and Hypopharyngeal Cancers](#)
- [Immunotherapy for Laryngeal and Hypopharyngeal Cancers](#)

## Common treatment approaches

Depending on the stage of the cancer and your overall health, different treatment options may be used alone or in combination. In creating your treatment plan, the most important factors to consider are the site and the stage (extent) of the cancer. Your cancer care team will also take into account your general health and your personal preferences. A major focus of treatments is to try to save your larynx and voice if at all possible. Most experts don't recommend surgery that will totally remove the larynx unless there are no other options.

- [Treating Laryngeal and Hypopharyngeal Cancers by Stage](#)
- [Treating Recurrent Laryngeal and Hypopharyngeal Cancers](#)

## Who treats laryngeal and hypopharyngeal cancers?

Based on your treatment options, you might have different types of doctors on your

treatment team. These doctors can include:

- An **otolaryngologist** (also known as an *ear, nose, and throat*, or *ENT* doctor): a surgeon who treats certain diseases of the head and neck.
- A **radiation oncologist**: a doctor who treats cancer with radiation therapy.
- A **medical oncologist**: a doctor who treats cancer with medicines such as chemotherapy.

Many other specialists could be involved in your care as well, including physician assistants, nurse practitioners, nurses, nutrition specialists, speech therapists, social workers, and other health professionals. In fact, a speech therapist and dietician are key players on your cancer care team. You'll meet with them before treatment starts so they can see how well you can swallow and make a nutrition plan for you to follow during treatment.

- [Health Professionals Associated With Cancer Care](#)<sup>1</sup>

## Making treatment decisions

It's important to discuss all treatment options, including their goals and possible side effects, with your doctors to help make the decision that best fits your needs. For instance, if the cancer is too advanced to be cured, the goal may be to remove or destroy as much of the cancer as possible to keep the tumor from growing, spreading, or returning for as long as possible. Some of the treatments can also be used as palliative treatment if all the cancer cannot be removed. Palliative treatment is meant to relieve symptoms, such as pain or trouble swallowing, but it's not expected to cure the cancer.

If time permits, it is often a good idea to seek a second opinion. A second opinion can give you more information and help you feel more confident about the treatment plan you choose.

- [Questions to Ask Your Doctor About Laryngeal or Hypopharyngeal Cancer](#)<sup>2</sup>
- [Seeking a Second Opinion](#)<sup>3</sup>

## Thinking about taking part in a clinical trial

Clinical trials are carefully controlled research studies that are done to get a closer look at promising new treatments or procedures. Clinical trials are one way to get state-of-the-art cancer treatment. In some cases they may be the only way to get access to

newer treatments. They are also the best way for doctors to learn better methods to treat cancer. Still, they're not right for everyone.

If you would like to learn more about clinical trials that might be right for you, start by asking your doctor if your clinic or hospital conducts clinical trials.

- [Clinical Trials](#)<sup>4</sup>

## **Considering complementary and alternative methods**

You may hear about alternative or complementary methods that your doctor hasn't mentioned to treat your cancer or relieve symptoms. These methods can include vitamins, herbs, and special diets, or other methods such as acupuncture or massage, to name a few.

Complementary methods refer to treatments that are used along with your regular medical care. Alternative treatments are used instead of a doctor's medical treatment. Although some of these methods might be helpful in relieving symptoms or helping you feel better, many have not been proven to work. Some might even be harmful.

Be sure to talk to your cancer care team about any method you are thinking about using. They can help you learn what is known (or not known) about the method, which can help you make an informed decision.

- [Complementary and Alternative Medicine](#)<sup>5</sup>

## **Help getting through cancer treatment**

People with cancer need support and information, no matter what stage of illness they may be in. Knowing all of your options and finding the resources you need will help you make informed decisions about your care.

Whether you are thinking about treatment, getting treatment, or not being treated at all, you can still get supportive care to help with pain or other symptoms. Communicating with your cancer care team is important so you understand your diagnosis, what treatment is recommended, and ways to maintain or improve your quality of life.

Different types of programs and support services may be helpful, and can be an important part of your care. These might include nursing or social work services, financial aid, nutritional advice, rehab, or spiritual help.

The American Cancer Society also has programs and services – including rides to treatment, lodging, and more – to help you get through treatment. Call our National Cancer Information Center at 1-800-227-2345 and speak with one of our trained specialists.

- [Palliative Care](#)<sup>6</sup>
- [Find Support Programs and Services in Your Area](#)<sup>7</sup>

### **Choosing to stop treatment or choosing no treatment at all**

For some people, when treatments have been tried and are no longer controlling the cancer, it could be time to weigh the benefits and risks of continuing to try new treatments. Whether or not you continue treatment, there are still things you can do to help maintain or improve your quality of life.

Some people, especially if the cancer is advanced, might not want to be treated at all. There are many reasons you might decide not to get cancer treatment, but it's important to talk to your doctors and you make that decision. Remember that even if you choose not to treat the cancer, you can still get supportive care to help with pain or other symptoms.

- [If Cancer Treatments Stop Working](#)<sup>8</sup>

*The treatment information given here is not official policy of the American Cancer Society and is not intended as medical advice to replace the expertise and judgment of your cancer care team. It is intended to help you and your family make informed decisions, together with your doctor. Your doctor may have reasons for suggesting a treatment plan different from these general treatment options. Don't hesitate to ask him or her questions about your treatment options.*

---

## **Surgery for Laryngeal and Hypopharyngeal Cancers**

Surgery is commonly used to treat [laryngeal and hypopharyngeal cancers](#)<sup>1</sup>. Depending on the type, [stage](#),<sup>2</sup> location of the cancer, and other tissues involved, different

operations may be used to remove the cancer and sometimes other tissues near the larynx or hypopharynx. In almost all surgeries, the plan is to take out all of the cancer along with a rim (margin) of healthy tissue around it.

Surgery might be the only treatment needed for some early stage cancers. It also might be used along with other treatments, like [chemotherapy](#) or [radiation](#), for later stage cancers.

After the cancer is removed, reconstructive surgery may be done to help make the changed areas look and work better.

## **Surgery to treat the cancer**

### **Endoscopic surgery**

For this surgery, an [endoscope](#)<sup>3</sup> is passed down your throat to find the tumor. The endoscope is a long thin tube with a light and camera on the end of it. This can be done to biopsy and treat some early stage tumors of the larynx.

The doctor can see the tumor using the camera, and pass long surgical instruments through the endoscope to strip away the superficial layers of tissue on the vocal cords. Most people can speak normally again after this operation.

Lasers can also be used through the endoscope. They can be used to either vaporize or excise (cut out) the tumor. A drawback of laser surgery is that it leaves nothing behind that can be taken out and tested. If the laser is used to remove part of a vocal cord, it may result in a hoarse voice.

### **Corpectomy**

For a corpectomy the surgeon removes all or part of your vocal cords. This can be used to treat very small or superficial glottic (vocal cord) cancers. The effect of this procedure on speech depends on how much of the vocal cords are removed. Removing part of a vocal cord may cause hoarseness. Removing both vocal cords makes normal speech no longer possible.

### **Laryngectomy**

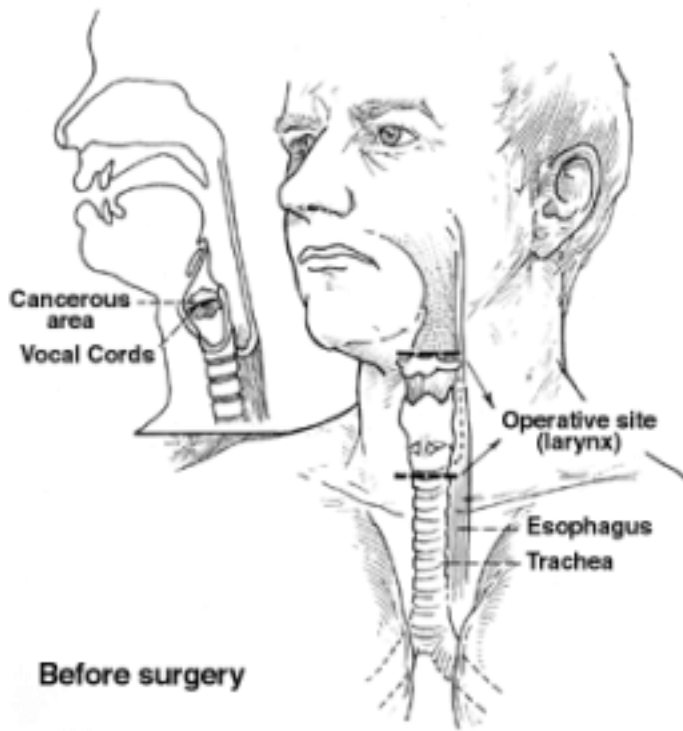
Laryngectomy is the removal of part or all of the larynx (voice box).

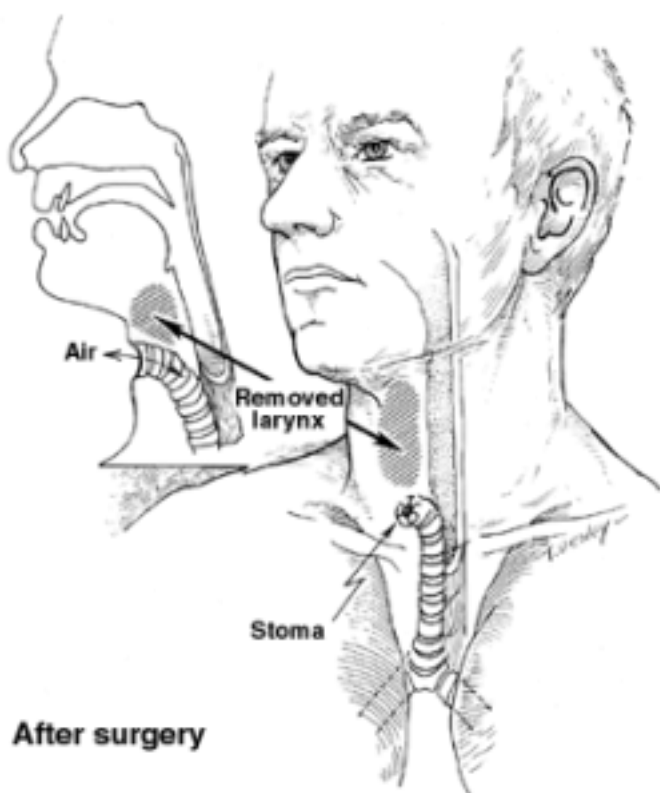
**Partial laryngectomy:** Smaller cancers of the larynx often can be treated by removing only part of the voice box. There are different types of partial laryngectomies, but they all have the same goal: to take out all of the cancer while leaving behind as much of the larynx as possible.

In a *supraglottic laryngectomy*, only the part of your larynx above the vocal cords is removed. This procedure can be used to treat some supraglottic cancers, and will allow you to speak normally afterward.

For small cancers of the vocal cords, the surgeon may be able to remove the cancer by taking out only one side of the larynx (one vocal cord) and leaving the other behind. This is called a *hemilaryngectomy*. Some speech remains after this surgery.

**Total laryngectomy:** In this procedure, your entire larynx is removed. The trachea (windpipe) is then brought up through the skin of the front of your neck as a [stoma](#)<sup>4</sup> (or hole) that you breathe through (see the picture below). This is called a *tracheostomy*. When the entire larynx is removed, you can no longer speak normally, but you can learn other ways of speaking. (See [Living as a Laryngeal or Hypopharyngeal Cancer Survivor](#)<sup>5</sup>) The connection between the throat and the esophagus (swallowing tube) is usually not affected, so you can swallow food and liquids just as you did before the operation.





*Illustrations by permission of the Mayo Foundation. From "Looking Forward...A Guidebook for the Laryngectomee" by R.L. Keith, et al, New York, Thieme-Stratton, Inc. and copyrighted by the Mayo Foundation, 1984.*

### **Total or partial pharyngectomy**

Surgery to remove all or part of the pharynx (throat) is called a *pharyngectomy*. This operation may be used to treat cancers of the hypopharynx. Often, the larynx is removed along with the hypopharynx. After surgery, you may need reconstructive surgery to rebuild this part of the throat and improve your ability to swallow.

### **Lymph node removal**

Cancers of the larynx and hypopharynx may spread to the [lymph nodes](#)<sup>6</sup> in the neck. If your doctor thinks that lymph node spread is likely, lymph nodes (and other nearby tissues) may be removed from your neck. This operation, called a *neck dissection*, is done at the same time as the surgery to remove the main tumor. Doctors determine how likely the cancer has spread to the lymph nodes based on the size and location of the tumor and whether or not the lymph nodes are enlarged on an [imaging test](#)<sup>7</sup>.



There are several forms of neck dissections, ranging from a *radical neck dissection* to a less extensive *selective neck dissection*. They differ in the amount of tissue removed from the neck.

In a full radical dissection, nerves and muscles responsible for some neck and shoulder movement are removed along with the lymph nodes. This might be needed to be sure that all of the lymph nodes likely to contain cancer are removed. If possible, doctors will try to remove less normal tissue to try to keep your shoulder and neck working normally.

## Thyroidectomy

Sometimes the cancer spreads into the thyroid gland and all or part of it must be removed. The thyroid sits in the front of your neck and wraps around to the sides of the trachea (windpipe). It makes hormones that control your metabolism and how your body uses calcium.

If all of the thyroid gland is removed, your body can no longer make the thyroid hormone it needs. In this case, you must take thyroid hormone (levothyroxine) pills to replace the loss of the natural hormone.

## Other surgeries that may be needed

### Reconstructive surgery

These operations may be done to help restore the structure or function of areas affected by major surgeries needed to remove the cancer.

**Myocutaneous flaps:** Sometimes a muscle and area of skin may be rotated from an area close to your throat, such as the chest (pectoralis major flap), to reconstruct or rebuild part of your throat.

**Free flaps:** With the advances in microvascular surgery (sewing together small blood vessels under a microscope), surgeons now have many more reconstruction options. Tissues from other parts of your body such as a piece of intestine or a piece of arm muscle can be used to replace parts of your throat.

### Tracheostomy/tracheotomy

A tracheostomy (tracheotomy) is when the trachea (windpipe) is connected to a hole (stoma) in the front of the neck to help a person breathe by letting air in and out of the

lungs through that hole. It may be used in certain cases.

For instance, after a partial laryngectomy or pharyngectomy, a temporary (short-term) tracheostomy may be needed to help protect your airway while you recover from surgery. To do this, a small plastic tube called a *trach tube* is put into your trachea through a hole in the front of your neck. The tube stays in place for a short time, and is removed when it's no longer needed. You then breathe through your mouth and nose like you did before.

As described above, a permanent tracheostomy is needed after a total laryngectomy. In this case, the opening in the trachea is attached to a hole in the skin in the front of your neck. A trach tube or stoma cover may be needed to help keep the tracheostomy hole open. You will breathe through this opening instead of through your mouth and nose.

If a laryngeal or hypopharyngeal cancer is blocking the windpipe and is too big to remove completely, an opening may be made to connect the lower part of your windpipe to a stoma (hole) in the front of your neck to bypass the tumor and allow you to breathe more comfortably.

### **Gastrostomy tube**

Cancers in the larynx and hypopharynx may keep you from swallowing enough food to maintain good nutrition. This can make you weak and make it harder to complete treatment.

A *gastrostomy tube* (*G tube*) is a feeding tube that's put through the skin and muscle of your abdomen (belly) and right into your stomach. The tube is often put in place with the help of a flexible, lighted instrument (endoscope) passed down your mouth and into the stomach. This is done while you are sedated. When it's placed through endoscopy, it's called a *percutaneous endoscopic gastrostomy*, or *PEG tube*. Another option is to put the tube in during an operation. Once in place, liquid nutrition can be put right into the stomach through the tube.

Often, the gastrostomy tube is only needed for a short time to help you get enough nutrition during cancer treatment. The tube can be removed once you can swallow again after treatment. It's important to keep swallowing even when you're getting most of your nutrition through a G tube. This helps keep those muscles active and gives you a better chance of going back to normal swallowing after treatment is complete.

### **Possible risks and side effects of surgery**

All surgery carries some risks, including blood clots, infections, complications from anesthesia, and pneumonia. These risks are generally low but are higher with more complicated operations.

Patients who have a laryngectomy or pharyngectomy typically lose the ability to speak normally. Some people will need a tracheostomy after surgery. Less extensive operations can also affect speech in some cases. (See [Living as a Laryngeal or Hypopharyngeal Cancer Survivor](#)<sup>8</sup> for more about speech after surgery.)

Surgeries that affect the throat or voice box can lead to a gradual narrowing (stenosis) of the throat or larynx (if it remains after surgery). Sometimes this can affect breathing. If this happens, you might need a tracheostomy.

Throat or larynx surgeries may also sometimes affect your ability to swallow. This can affect how you eat, and might be severe enough to require a permanent feeding tube.

Laryngectomy and pharyngectomy can also lead to the development of a fistula (an abnormal opening between 2 areas that are not normally connected). Surgery may be needed to fix it.

A very rare but serious complication of neck surgery is rupture of a carotid artery (the large artery on either side of the neck).

For more general information on surgery as a treatment for cancer, see [Cancer Surgery](#)<sup>9</sup>.

## Hyperlinks

1. [www.cancer.org/cancer/laryngeal-and-hypopharyngeal-cancer/about/what-is-laryngealand-hypopharyngeal.html](http://www.cancer.org/cancer/laryngeal-and-hypopharyngeal-cancer/about/what-is-laryngealand-hypopharyngeal.html)
2. [www.cancer.org/cancer/laryngeal-and-hypopharyngeal-cancer/detection-diagnosis-staging/staging.html](http://www.cancer.org/cancer/laryngeal-and-hypopharyngeal-cancer/detection-diagnosis-staging/staging.html)
3. [www.cancer.org/treatment/understanding-your-diagnosis/tests/endoscopy.html](http://www.cancer.org/treatment/understanding-your-diagnosis/tests/endoscopy.html)
4. [www.cancer.org/treatment/treatments-and-side-effects/treatment-types/surgery/ostomies/stomas-or-ostomies.html](http://www.cancer.org/treatment/treatments-and-side-effects/treatment-types/surgery/ostomies/stomas-or-ostomies.html)
5. [www.cancer.org/cancer/laryngeal-and-hypopharyngeal-cancer/after-treatment.html](http://www.cancer.org/cancer/laryngeal-and-hypopharyngeal-cancer/after-treatment.html)
6. [www.cancer.org/cancer/cancer-basics/lymph-nodes-and-cancer.html](http://www.cancer.org/cancer/cancer-basics/lymph-nodes-and-cancer.html)
7. [www.cancer.org/cancer/laryngeal-and-hypopharyngeal-cancer/detection-diagnosis-staging/how-diagnosed.html](http://www.cancer.org/cancer/laryngeal-and-hypopharyngeal-cancer/detection-diagnosis-staging/how-diagnosed.html)
8. [www.cancer.org/cancer/laryngeal-and-hypopharyngeal-cancer/after-treatment.html](http://www.cancer.org/cancer/laryngeal-and-hypopharyngeal-cancer/after-treatment.html)

9. [www.cancer.org/treatment/treatments-and-side-effects/treatment-types/surgery.html](http://www.cancer.org/treatment/treatments-and-side-effects/treatment-types/surgery.html)

## References

American Society of Clinical Oncology. Laryngeal and Hypopharyngeal Cancer: Treatment Options. 12/2016. Accessed at [www.cancer.net/cancer-types/laryngeal-and-hypopharyngeal-cancer/treatment-options](http://www.cancer.net/cancer-types/laryngeal-and-hypopharyngeal-cancer/treatment-options) on November 7, 2017.

Britt CJ, Gourin CG. Contemporary Management of Advanced Laryngeal Cancer. *Laryngoscope Investig Otolaryngol*. 2017;2(5):307-309.

Jones TM, De M, Foran B, Harrington K, Mortimore S. Laryngeal cancer: United Kingdom National Multidisciplinary guidelines. *J Laryngol Otol*. 2016;130(S2):S75-S82.

Lorenzo JG, Martinez VM, Quera AR, et al. Modifications in the treatment of advanced laryngeal cancer throughout the last 30 years. *Eur Arch Otorhinolaryngol*. 2017;274:3449–3455.

National Cancer Institute. Hypopharyngeal Cancer Treatment (PDQ®)—Health Professional Version. December 22, 2016. Accessed at [www.cancer.gov/types/head-and-neck/hp/hypopharyngeal-treatment-pdq](http://www.cancer.gov/types/head-and-neck/hp/hypopharyngeal-treatment-pdq) on November 7, 2017.

National Cancer Institute. Laryngeal Cancer Treatment (PDQ®)—Health Professional Version. July 21, 2017. Accessed at [www.cancer.gov/types/head-and-neck/hp/laryngeal-treatment-pdq/](http://www.cancer.gov/types/head-and-neck/hp/laryngeal-treatment-pdq/) on November 7, 2017.

National Comprehensive Cancer Network. NCCN Clinical Practice Guidelines in Oncology. Head and Neck Cancers. Version 2.2017 -- May 8, 2017.

Pracy P, Loughran s, Good J, Parmar S, Goranova R. Hypopharyngeal cancer: United Kingdom National Multidisciplinary Guidelines. *J Laryngol Otol*. 2016; 130(Suppl 2): S104–S110.

Salvador-Coloma C, Cohen E. Multidisciplinary Care of Laryngeal Cancer. *J Oncol Pract*. 2016;12(8):717-724.

Steuer CE, El-Deiry M, Parks JR, Higgins KA, Saba NF. An update on larynx cancer. *CA Cancer J Clin*. 2017;67(1):31-50.

See all references for Laryngeal and Hypopharyngeal Cancer  
([www.cancer.org/cancer/laryngeal-and-hypopharyngeal-cancer/references.html](http://www.cancer.org/cancer/laryngeal-and-hypopharyngeal-cancer/references.html))

Last Medical Review: November 27, 2017 Last Revised: November 27, 2017

## Radiation Therapy for Laryngeal and Hypopharyngeal Cancers

Radiation therapy uses high-energy x-rays, gamma rays, or particles to kill cancer cells. When treating [laryngeal and hypopharyngeal cancers](#)<sup>1</sup>, radiation therapy might be used in several ways:

- As the main (primary) treatment for some early [stage](#)<sup>2</sup> laryngeal and hypopharyngeal cancers. If the cancer is small, it can often be destroyed by radiation and [surgery](#) isn't needed. This can help to preserve better voice quality.
- To treat patients who are too sick to have surgery.
- After surgery, to try to kill any small areas of cancer that may remain and help lower the chance the cancer will come back. (This is called *adjuvant treatment*.)
- To treat cancer that comes back after treatment ([cancer recurrence](#)<sup>3</sup>).
- To ease symptoms of advanced laryngeal and hypopharyngeal cancer such as pain, bleeding, trouble swallowing, and problems caused when cancer spreads to the bones. (This is called [palliative or supportive care](#)<sup>4</sup>.)

Many times [chemotherapy](#) is given along with the radiation. This combination, called *chemoradiation*, can work better than radiation alone, but it also has more [side effects](#)<sup>5</sup>.

Radiation to this part of your body can affect your teeth and gums, so it's important to see a dentist before starting treatment. A dentist can make sure your mouth is healthy before treatment. During and after treatment a dentist can help check for and treat any problems that may come up, such as infection or tooth/bone damage.

Smoking during radiation treatment is linked to worse outcomes, so you should stop smoking completely before starting treatment. Smoking also increases the risk of the cancer coming back after treatment as well as the risk of getting another cancer, so [quitting smoking](#)<sup>6</sup> for good is the best way to improve your survival.

## Types of radiation therapy

There are 2 main types of radiation therapy.

### External beam radiation therapy

This is the most common type of radiation therapy used to treat laryngeal and hypopharyngeal cancer. Radiation from a source outside the body is focused on the cancer.

Before your treatments start, the radiation team will use a [CT scan](#)<sup>7</sup> to take careful measurements to determine the correct angles for aiming the radiation beams and the proper dose of radiation. A mesh head and body cast may be made to hold your head, neck, and shoulders in the exact same position for each treatment.

Radiation therapy is much like getting an x-ray, but the radiation is much stronger. The procedure itself is painless. Each treatment lasts only a few minutes, but the setup time – getting you into place for treatment – usually takes longer.

Radiation therapy for laryngeal and hypopharyngeal cancer is usually given in daily fractions (doses), 5 days per week, for about 7 weeks.

Other schedules for radiation may be used to treat laryngeal cancer. For instance, in *hyperfractionation radiation therapy*, a slightly higher daily radiation dose is split into 2 smaller doses and the patient gets 2 doses per day instead of 1.

There are also newer techniques that help doctors focus the radiation more precisely:

- **Three-dimensional conformal radiation therapy (3D-CRT):** 3D-CRT uses the results of imaging tests such as [MRI](#)<sup>8</sup> and special computers to precisely map the location of the tumor. Several radiation beams are then shaped and aimed at the tumor from different directions. Each beam alone is fairly weak, which makes it less likely to damage normal tissues it passes through, but the beams meet at the tumor to give a higher dose of radiation there.
- **Intensity modulated radiation therapy (IMRT):** IMRT is an advanced form of 3D therapy. It uses a computer-driven machine that actually moves around the patient as it delivers radiation. Along with shaping the beams and aiming them at the tumor from several angles, the intensity (strength) of the beams can be adjusted to limit the dose reaching the most sensitive nearby normal tissues. This may let the doctor deliver a higher dose to the tumor. **This is the most common way radiation is**

**given for laryngeal and hypopharyngeal cancer.**

## **Brachytherapy**

Internal radiation therapy, also known as brachytherapy, uses radioactive material put right into or near the cancer. Brachytherapy may be used alone or along with external beam radiation therapy. It's rarely used to treat laryngeal and hypopharyngeal cancer.

## **Side effects of radiation therapy**

Many people treated with radiation to the neck and throat area have [painful sores](#)<sup>9</sup> in the mouth and throat that can make it very [hard to eat and drink](#)<sup>10</sup>. This can lead to weight loss and malnutrition. The sores heal with time after the radiation ends, but some people continue to have problems swallowing long after treatment ends. Ask about swallowing exercises you can do to help keep those muscles working and increase your chance of eating normally after treatment.

Other [side effects](#)<sup>11</sup> of radiation therapy may include:

- Skin problems in the area being treated, ranging from redness to blistering and peeling
- Dry mouth
- Worsening of hoarseness
- Trouble swallowing
- Loss of taste
- Possible breathing trouble from swelling
- Tiredness
- Hearing problems

Most of these side effects slowly go away when treatment is over. Side effects of radiation tend to be worse if chemotherapy is given at the same time. Tell your doctor about any side effects you have because there are often ways to help.

Radiation aimed at the head and neck might damage the salivary glands, leading to dry mouth that doesn't get better with time. This can cause discomfort and problems swallowing, and can also lead to tooth decay. People treated with radiation to the neck and throat must pay close attention to their oral health.

Radiation may also damage your thyroid gland. Your doctor will do blood tests to see how well your thyroid is working. You may need treatment if it's been damaged.

When radiation is used as the main treatment for cancer of the larynx, it could very rarely lead to breakdown of the cartilage in the throat. If this happens, you may need a [tracheostomy](#) or [laryngectomy](#).

## More information about radiation therapy

To learn more about how radiation is used to treat cancer, see [Radiation Therapy](#)<sup>12</sup>.

To learn about some of the side effects listed here and how to manage them, see [Managing Cancer-related Side Effects](#)<sup>13</sup>.

## Hyperlinks

1. [www.cancer.org/cancer/laryngeal-and-hypopharyngeal-cancer/about/what-is-laryngealand-hypopharyngeal.html](http://www.cancer.org/cancer/laryngeal-and-hypopharyngeal-cancer/about/what-is-laryngealand-hypopharyngeal.html)
2. [www.cancer.org/cancer/laryngeal-and-hypopharyngeal-cancer/detection-diagnosis-staging/staging.html](http://www.cancer.org/cancer/laryngeal-and-hypopharyngeal-cancer/detection-diagnosis-staging/staging.html)
3. [www.cancer.org/treatment/survivorship-during-and-after-treatment/understanding-recurrence.html](http://www.cancer.org/treatment/survivorship-during-and-after-treatment/understanding-recurrence.html)
4. [www.cancer.org/treatment/treatments-and-side-effects/palliative-care.html](http://www.cancer.org/treatment/treatments-and-side-effects/palliative-care.html)
5. [www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects.html](http://www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects.html)
6. [www.cancer.org/healthy/stay-away-from-tobacco/guide-quitting-smoking.html](http://www.cancer.org/healthy/stay-away-from-tobacco/guide-quitting-smoking.html)
7. [www.cancer.org/treatment/understanding-your-diagnosis/tests/ct-scan-for-cancer.html](http://www.cancer.org/treatment/understanding-your-diagnosis/tests/ct-scan-for-cancer.html)
8. [www.cancer.org/treatment/understanding-your-diagnosis/tests/mri-for-cancer.html](http://www.cancer.org/treatment/understanding-your-diagnosis/tests/mri-for-cancer.html)
9. [www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects/mouth-problems/mouth-sores.html](http://www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects/mouth-problems/mouth-sores.html)
10. [www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects/eating-problems.html](http://www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects/eating-problems.html)
11. [www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects.html](http://www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects.html)
12. [www.cancer.org/treatment/treatments-and-side-effects/treatment-types/radiation.html](http://www.cancer.org/treatment/treatments-and-side-effects/treatment-types/radiation.html)
13. [www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects.html](http://www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects.html)



## References

American Society of Clinical Oncology. Laryngeal and Hypopharyngeal Cancer: Treatment Options. 12/2016. Accessed at [www.cancer.net/cancer-types/laryngeal-and-hypopharyngeal-cancer/treatment-options](http://www.cancer.net/cancer-types/laryngeal-and-hypopharyngeal-cancer/treatment-options) on November 7, 2017.

Britt CJ, Gourin CG. Contemporary Management of Advanced Laryngeal Cancer. *Laryngoscope Investig Otolaryngol*. 2017;2(5):307-309.

National Cancer Institute. Laryngeal Cancer Treatment (PDQ®)—Patient Version. September 27, 2017. Accessed at [www.cancer.gov/types/head-and-neck/patient/laryngeal-treatment-pdq#section/\\_55](http://www.cancer.gov/types/head-and-neck/patient/laryngeal-treatment-pdq#section/_55) on November 8, 2017.

National Comprehensive Cancer Network. NCCN Clinical Practice Guidelines in Oncology. Head and Neck Cancers. Version 2.2017 -- May 8, 2017.

Pracy P, Loughran s, Good J, Parmar S, Goranova R. Hypopharyngeal cancer: United Kingdom National Multidisciplinary Guidelines. *J Laryngol Otol*. 2016; 130(Suppl 2): S104–S110.

Steuer CE, El-Deiry M, Parks JR, Higgins KA, Saba NF. An update on larynx cancer. *CA Cancer J Clin*. 2017;67(1):31-50.

See all references for Laryngeal and Hypopharyngeal Cancer ([www.cancer.org/cancer/laryngeal-and-hypopharyngeal-cancer/references.html](http://www.cancer.org/cancer/laryngeal-and-hypopharyngeal-cancer/references.html))

Last Medical Review: November 27, 2017 Last Revised: November 27, 2017

---

# Chemotherapy for Laryngeal and Hypopharyngeal Cancers

Chemotherapy (chemo) uses anti-cancer drugs that are injected into a vein or given by mouth. These drugs enter the bloodstream and reach all areas of the body, making this treatment useful for cancers that have spread.

Chemo may be used in these ways for [laryngeal and hypopharyngeal cancers](#)<sup>1</sup>:

- Along with [radiation](#) as the main treatment for more advanced cancers of the larynx. This treatment, called *chemoradiation*, can allow some patients to avoid [laryngectomy](#) and be able to speak. **Chemoradiation is a common treatment for laryngeal and hypopharyngeal cancers.** (See chemoradiation below.)
- As part of chemoradiation after cancer has been removed with [surgery](#). The goal is to try to kill any small areas of cancer that may remain and lower the chance the cancer will come back. This is called *adjuvant treatment*.
- Before radiation or surgery to help shrink a large tumor so it's easier to treat or to ease problems it might be causing. This may be called *neoadjuvant treatment* or *induction chemotherapy*. It's also thought that tumor response to induction chemo may help in making plans for the next treatment. If there's good response (the tumor shrinks), chemoradiation and organ preservation may be best. (These are covered below in the chemoradiation section.) If there's little or no tumor response, surgery may be needed.
- To help relieve symptoms from cancers that are too big or have spread too far to be completely removed with surgery. This may be called [supportive or palliative care](#)<sup>2</sup>.

## Chemo drugs

Chemo drugs work by attacking cells that are dividing quickly, this includes cancer cells. Some of the chemo drugs commonly used for cancers of the larynx and hypopharynx include:

- Cisplatin
- Carboplatin
- 5-fluorouracil (5-FU)
- Docetaxel (Taxotere<sup>®</sup>)
- Paclitaxel (Taxol<sup>®</sup>)
- Epirubicin

Treatment may involve the use of a single drug or 2 or more in combination. A common combination is cisplatin and 5-FU, but other combinations are also used.

Doctors give chemo in cycles, with each period of treatment followed by a rest period to give the body time to recover. In most cases, each cycle lasts for a few weeks.

## Chemoradiation

Chemoradiation (also called *chemoradiotherapy*) is chemotherapy given at the same time as [radiation](#). This has been shown to shrink laryngeal and hypopharyngeal tumors more than either treatment alone. Some call this *organ preservation treatment* because chemoradiation can be used instead of [surgery](#) so the structures in and near the larynx are not altered.

Chemoradiation can be used in different situations:

- As the main treatment to treat some laryngeal and hypopharyngeal cancers. If the tumor goes away completely with chemoradiation, no other treatment may be needed. But if some cancer remains, surgery may be needed.
- As the main treatment for people who are too sick for surgery or don't want to have surgery.
- After surgery to try to lower the risk that the cancer will come back. This may be needed if cancer is found at the edges (margins) of the removed tumor, or if the cancer has other features that make it more likely to come back after surgery.
- If the cancer has spread to nearby [lymph nodes](#)<sup>3</sup>.

A common regimen is to give a dose of cisplatin every 3 weeks (for a total of 3 doses) during radiation. For people who cannot tolerate chemoradiation, the [targeted drug](#) cetuximab is often used with radiation instead.

## Chemo side effects

Chemo drugs kill cells that are dividing quickly, which is why they work against cancer cells. But other cells, such as those in the bone marrow (where new blood cells are made), the lining of the mouth and intestines, and the hair follicles, also divide quickly. These cells can also be affected by chemo. This leads to [side effects](#)<sup>4</sup>. Side effects depend on the specific drugs used, their dose, and the length of treatment. Side effects tend to be worse when chemo is given along with radiation. Common side effects of chemo include:

- Nausea and vomiting
- Loss of appetite
- Mouth sores
- Diarrhea
- Hair loss
- An increased chance of infection (from a shortage of white blood cells)
- Problems with bleeding or bruising (from a shortage of blood platelets)

- Fatigue or shortness of breath (from low red blood cell counts)

Along with the risks above, some chemo drugs can cause other side effects. For instance, cisplatin, docetaxel, and paclitaxel can cause nerve damage (called neuropathy), which can lead to numbness, tingling, or even pain in the hands and feet. The nerve damage caused by cisplatin can also cause hearing loss. This often improves once treatment is stopped, but it can last a long time in some people.

Although most side effects improve once treatment is stopped, some can last a long time or even last forever. If your doctor plans treatment with chemo, be sure to discuss the drugs that will be used and the possible side effects. Once chemo is started, let your health care team know if you have side effects, so they can be treated. There are ways to prevent or treat many of the side effects of chemo. For instance, there are many drugs that can help prevent or treat nausea and vomiting.

## More information about chemotherapy

To learn more about how chemotherapy is used to treat cancer, see [Chemotherapy](#)<sup>5</sup>.

To learn about some of the side effects listed here and how to manage them, see [Managing Cancer-related Side Effects](#)<sup>6</sup>.

## Hyperlinks

1. [www.cancer.org/cancer/laryngeal-and-hypopharyngeal-cancer/about/what-is-laryngealand-hypopharyngeal.html](http://www.cancer.org/cancer/laryngeal-and-hypopharyngeal-cancer/about/what-is-laryngealand-hypopharyngeal.html)
2. [www.cancer.org/treatment/treatments-and-side-effects/palliative-care.html](http://www.cancer.org/treatment/treatments-and-side-effects/palliative-care.html)
3. [www.cancer.org/cancer/cancer-basics/lymph-nodes-and-cancer.html](http://www.cancer.org/cancer/cancer-basics/lymph-nodes-and-cancer.html)
4. [www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects.html](http://www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects.html)
5. [www.cancer.org/treatment/treatments-and-side-effects/treatment-types/chemotherapy.html](http://www.cancer.org/treatment/treatments-and-side-effects/treatment-types/chemotherapy.html)
6. [www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects.html](http://www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects.html)

## References

American Society of Clinical Oncology. Laryngeal and Hypopharyngeal Cancer: Treatment Options. 12/2016. Accessed at [www.cancer.net/cancer-types/laryngeal-and-hypopharyngeal-cancer/treatment-options](http://www.cancer.net/cancer-types/laryngeal-and-hypopharyngeal-cancer/treatment-options) on November 8, 2017.

Britt CJ, Gourin CG. Contemporary Management of Advanced Laryngeal Cancer. *Laryngoscope Invest Otolaryngol*. 2017;2(5):307-309.

Jones TM, De M, Foran B, Harrington K, Mortimore S. Laryngeal cancer: United Kingdom National Multidisciplinary guidelines. *J Laryngol Otol*. 2016;130(S2):S75-S82.

Lorenzo JG, Martinez VM, Quera AR, et al. Modifications in the treatment of advanced laryngeal cancer throughout the last 30 years. *Eur Arch Otorhinolaryngol*. 2017;274:3449–3455.

National Cancer Institute. Hypopharyngeal Cancer Treatment (PDQ®)—Patient Version. May 11, 2017. Accessed at [www.cancer.gov/types/head-and-neck/patient/hypopharyngeal-treatment-pdq#section/\\_48](http://www.cancer.gov/types/head-and-neck/patient/hypopharyngeal-treatment-pdq#section/_48) on November 8, 2017.

National Comprehensive Cancer Network. NCCN Clinical Practice Guidelines in Oncology. Head and Neck Cancers. Version 2.2017 -- May 8, 2017.

Pracy P, Loughran S, Good J, Parmar S, Goranova R. Hypopharyngeal cancer: United Kingdom National Multidisciplinary Guidelines. *J Laryngol Otol*. 2016; 130(Suppl 2): S104–S110.

Salvador-Coloma C, Cohen E. Multidisciplinary Care of Laryngeal Cancer. *J Oncol Pract*. 2016;12(8):717-724.

Steuer CE, El-Deiry M, Parks JR, Higgins KA, Saba NF. An update on larynx cancer. *CA Cancer J Clin*. 2017;67(1):31-50.

See all references for Laryngeal and Hypopharyngeal Cancer  
([www.cancer.org/cancer/laryngeal-and-hypopharyngeal-cancer/references.html](http://www.cancer.org/cancer/laryngeal-and-hypopharyngeal-cancer/references.html))

Last Medical Review: November 27, 2017 Last Revised: November 27, 2017

---

## Targeted Therapy for Laryngeal and Hypopharyngeal Cancers

As researchers have learned more about the changes in cells that cause cancer,

they've been able to develop newer drugs that specifically target these changes. Targeted drugs work differently from [standard chemo drugs](#). They may work in some cases when chemo doesn't. They also tend to have different (and less severe) side effects. So they may be useful in treating people who cannot tolerate chemo [side effects](#)<sup>1</sup>.

Cetuximab (Erbix<sup>®</sup>) is a [monoclonal antibody](#)<sup>2</sup>, which is a man-made version of an immune system protein. It targets epidermal growth factor receptor (EGFR), a protein on the surface of certain cells that helps them grow and divide. [Laryngeal and hypopharyngeal cancer](#)<sup>3</sup> cells often have more than normal amounts of EGFR. By blocking EGFR, cetuximab can slow or stop cancer cell growth.

Cetuximab may be combined with [radiation therapy](#) for some earlier stage cancers. For more advanced cancers, such as those that have spread or come back after treatment, it may be combined with chemo drugs like cisplatin and 5FU, or it may be used by itself.

Cetuximab is given by infusion into a vein (IV), usually once a week. A rare but serious side effect of cetuximab is an allergic reaction during the first infusion, which could cause problems with breathing and low blood pressure. You will be given medicine before treatment to help prevent this.

Many people develop skin problems such as an acne-like rash on the face and chest during treatment, which in some cases can lead to infections. Other side effects might include headache, tiredness, fever, nausea, and diarrhea.

Talk to your doctor about the [side effects](#)<sup>4</sup> you should watch for and what can be done to help prevent or treat them.

Studies of other targeted therapy drugs to treat laryngeal and hypopharyngeal cancers are going on now.

To learn more about this cancer treatment see [Targeted Therapy](#)<sup>5</sup>.

## Hyperlinks

1. [www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects.html](http://www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects.html)
2. [www.cancer.org/treatment/treatments-and-side-effects/treatment-types/immunotherapy/monoclonal-antibodies.html](http://www.cancer.org/treatment/treatments-and-side-effects/treatment-types/immunotherapy/monoclonal-antibodies.html)
3. [www.cancer.org/cancer/laryngeal-and-hypopharyngeal-cancer/about/what-is-laryngealand-hypopharyngeal.html](http://www.cancer.org/cancer/laryngeal-and-hypopharyngeal-cancer/about/what-is-laryngealand-hypopharyngeal.html)
4. [www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects.html](http://www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects.html)

5. [www.cancer.org/treatment/treatments-and-side-effects/treatment-types/targeted-therapy.html](http://www.cancer.org/treatment/treatments-and-side-effects/treatment-types/targeted-therapy.html)

## References

American Society of Clinical Oncology. Laryngeal and Hypopharyngeal Cancer: Treatment Options. 12/2016. Accessed at [www.cancer.net/cancer-types/laryngeal-and-hypopharyngeal-cancer/treatment-options](http://www.cancer.net/cancer-types/laryngeal-and-hypopharyngeal-cancer/treatment-options) on November 8, 2017.

Bonner J, Giralt J, Harari P, et al. Cetuximab and Radiotherapy in Laryngeal Preservation for Cancers of the Larynx and Hypopharynx: A Secondary Analysis of a Randomized Clinical Trial. *JAMA Otolaryngol Head Neck Surg.* 2016;142(9):842-849.

National Cancer Institute. Laryngeal Cancer Treatment (PDQ®)—Patient Version. September 27, 2017. Accessed at [www.cancer.gov/types/head-and-neck/patient/laryngeal-treatment-pdq#section/\\_55](http://www.cancer.gov/types/head-and-neck/patient/laryngeal-treatment-pdq#section/_55) on November 8, 2017.

National Comprehensive Cancer Network. NCCN Clinical Practice Guidelines in Oncology. Head and Neck Cancers. Version 2.2017 -- May 8, 2017.

Steuer CE, El-Deiry M, Parks JR, Higgins KA, Saba NF. An update on larynx cancer. *CA Cancer J Clin.* 2017;67(1):31-50.

See all references for Laryngeal and Hypopharyngeal Cancer ([www.cancer.org/cancer/laryngeal-and-hypopharyngeal-cancer/references.html](http://www.cancer.org/cancer/laryngeal-and-hypopharyngeal-cancer/references.html))

Last Medical Review: November 27, 2017 Last Revised: November 27, 2017

---

# Immunotherapy for Laryngeal and Hypopharyngeal Cancers

Immunotherapy is the use of medicines that help a person's own immune system find and destroy cancer cells. It can be used to treat some people with laryngeal and hypopharyngeal cancer.

## Immune checkpoint inhibitors

An important part of the immune system is its ability to keep itself from attacking normal cells in the body. To do this, it uses “checkpoints” – proteins on immune cells that need to be turned on (or off) to start an immune response. Cancer cells sometimes use these checkpoints to avoid being attacked by the immune system. But newer drugs that target these checkpoints hold a lot of promise as cancer treatments.

**Pembrolizumab (Keytruda)** and **nivolumab (Opdivo)** are drugs that target PD-1, a protein on immune system cells called T cells that normally helps keep these cells from attacking other cells in the body. By blocking PD-1, these drugs boost the immune response against cancer cells. This can shrink some tumors or slow their growth.

These drugs can be used after [chemotherapy](#) in people with laryngeal or hypopharyngeal cancer that has returned after treatment or that has spread to other parts of the body. Pembrolizumab is also an option as the first treatment in some people.

These drugs are given as an intravenous (IV) infusion, typically every 2, 3, or 4 weeks.

### Possible side effects

Side effects of these drugs can include:

- Feeling tired or weak
- Fever
- Cough
- Nausea
- Itching
- Skin rash
- Loss of appetite
- Muscle or joint pain
- Constipation or diarrhea

Other, more serious side effects occur less often:

**Infusion reactions:** Some people might have an infusion reaction while getting these drugs. This is like an allergic reaction, and can include fever, chills, flushing of the face, rash, itchy skin, feeling dizzy, wheezing, and trouble breathing. It’s important to tell your doctor or nurse right away if you have any of these symptoms while getting these drugs.



**Autoimmune reactions:** These drugs work by basically removing one of the safeguards that normally helps keep the body's immune system in check. Sometimes the immune system starts attacking other parts of the body, which can cause serious or even life-threatening problems in the lungs, intestines, liver, hormone-making glands, kidneys, skin, or other organs.

It's very important to report any new side effects to your health care team promptly. If serious side effects do occur, treatment may need to be stopped and you may get high doses of corticosteroids to suppress your immune system.

## More information about immunotherapy

To learn more about how drugs that work on the immune system are used to treat cancer, see [Cancer Immunotherapy](#)<sup>1</sup>.

To learn about some of the side effects listed here and how to manage them, see [Managing Cancer-related Side Effects](#)<sup>2</sup>.

## Hyperlinks

1. [www.cancer.org/treatment/treatments-and-side-effects/treatment-types/immunotherapy.html](http://www.cancer.org/treatment/treatments-and-side-effects/treatment-types/immunotherapy.html)
2. [www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects.html](http://www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects.html)

## References

National Comprehensive Cancer Network. NCCN Clinical Practice Guidelines in Oncology. Head and Neck Cancers. Version 1.2019. Accessed at [https://www.nccn.org/professionals/physician\\_gls/pdf/head-and-neck.pdf](https://www.nccn.org/professionals/physician_gls/pdf/head-and-neck.pdf) on June 19, 2019.

Last Medical Review: June 19, 2019 Last Revised: June 19, 2019

---

# Treating Laryngeal and Hypopharyngeal

# Cancers by Stage

Most of the time, the treatment of laryngeal or hypopharyngeal cancer is based on its [stage](#)<sup>1</sup> – how far it has spread. But other factors, such as your overall health and your personal preferences, may also affect treatment options. Talk to your doctor if you have any [questions](#)<sup>2</sup> about the treatment plan he or she recommends. Make sure you understand the [goal of treatment](#)<sup>3</sup>. Ask how treatment will change how you look, talk, breathe, and eat.

## Laryngeal cancers

### Stage 0

These cancers are almost always glottic (vocal cord) cancers that are found early because of voice changes. They are nearly always curable with either [endoscopic surgery](#) or [radiation therapy](#). The patient is then watched closely to see if the cancer returns. If the cancer does come back, radiation can be used.

Almost all people at this stage can be cured without major surgery. But it's important for them to know that if they smoke, continuing to do so makes treatment less likely to work and increases the risk that another tumor will develop.

### Stage I and II laryngeal cancers

Most people with stage I and II laryngeal cancers can be treated successfully without totally removing their larynx.

Either [radiation](#) alone (without surgery) or [partial laryngectomy](#) can be used in most people. Many doctors use radiation therapy for smaller cancers. Voice results tend to be better with radiation therapy than with partial laryngectomy, and there tend to be fewer problems with radiation treatment.

The treatment for glottic (vocal cord) cancers and supraglottic cancers (those starting above the vocal cords) is slightly different. Some early glottic cancers may be treated by removing the vocal cord with cancer ([cordectomy](#)), or even by [laser surgery](#). [Radiation](#) or [surgery](#) is usually enough to treat most glottic cancers unless there are signs that the treatment might not have cured the cancer (such as finding cancer cells at the edge of the removed tumor). If you need more treatment after surgery, your options might include radiation therapy, [chemoradiation](#), or surgery to remove more of the larynx.

Supraglottic cancers are more likely to spread to the neck [lymph nodes](#)<sup>4</sup>. If so, the nodes are treated too. If you're having surgery for your tumor (supraglottic laryngectomy), then the surgeon may remove lymph nodes from your neck (called a lymph node dissection). If your treatment is radiation therapy alone, you will also get radiation to the lymph nodes in the neck. If, after surgery, the cancer is found to have features that make it more likely to come back, more treatment such as radiation therapy, chemoradiation, or more extensive surgery may be needed.

### Stage III and IV laryngeal cancers

The main options for initial treatment for these cancers are [surgery](#) or [chemotherapy](#) with [radiation](#). Radiation therapy alone (or with the [targeted drug cetuximab](#)) may be an option for people who cannot tolerate more intensive treatments. [Immunotherapy](#) might be another option for some people with stage IV cancer.

Surgery for these tumors is almost always complete removal of the larynx (total laryngectomy), but a small number of these cancers might be treated by partial laryngectomy.

If they haven't spread already, these cancers have a higher risk of spreading to nearby [lymph nodes](#)<sup>5</sup> in the neck, so these lymph nodes are often removed along with the tumor if surgery is being done. Radiation therapy, often given with chemo, may be needed after surgery, especially if the cancer has spread to the lymph nodes or has other features that make it more likely to come back.

Instead of using surgery as the first step, many doctors now prefer to start treatment with chemoradiation (radiation and chemotherapy given together). If any cancer remains after treatment, surgery can then be done to try to remove it. This treatment can be difficult, but it works as well as total laryngectomy and gives a chance to save the larynx. If the framework of the larynx (such as the thyroid cartilage) has been destroyed by the cancer, the larynx may never work normally again, no matter what treatment is chosen. In these cases, the best treatment may be surgery to remove the larynx and nearby tissues with cancer (such as the thyroid gland).

Another option may be to start with just chemotherapy, which is called *induction chemotherapy*. If the tumor shrinks, radiation therapy or chemoradiation is then given. If the tumor doesn't shrink, surgery is usually the next treatment.

Cancers that are too big or have spread too far to be completely removed by surgery are often treated with radiation, usually combined with chemotherapy or cetuximab. Another option might be treatment with an immunotherapy drug, either alone or with chemotherapy. Sometimes, if the tumor shrinks enough, surgery of lymph nodes in the

neck may be an option. But for many advanced cancers, the goal of treatment is often to stop or slow the growth of the cancer for as long as possible and to help relieve any symptoms it may be causing.

Most experts agree that treatment in a [clinical trial](#)<sup>6</sup> should be considered for advanced stage laryngeal cancers. This way patients can get the best treatment available now and may also get the treatments that are thought to be even better.

## Hypopharyngeal cancers

These cancers are often harder to treat than laryngeal cancers. Because they don't cause symptoms when they're small, most are already at an advanced [stage](#)<sup>7</sup> when they're diagnosed. Tumors in this area also tend to spread to the [lymph nodes](#)<sup>8</sup>, even when there's no obvious mass in the neck. Because of this, treatment of the lymph nodes in the neck is often recommended.

### Stage I hypopharyngeal cancers

The main options for initial treatment of these cancers are [surgery](#)<sup>9</sup> with or without [radiation](#) to the lymph nodes.

Surgery includes removing all or part of the pharynx (throat) as well as lymph nodes on both sides of the neck (lymph node dissection). The larynx (voice box) often needs to be removed as well. People who have a high chance of the cancer returning (based on what's found during surgery) may then be treated with radiation or [chemotherapy](#) combined with radiation (chemoradiation).

Some patients with small tumors may get radiation as their main treatment. The cancer is assessed again after the treatment is complete and if there's any cancer left, surgery is done.

### Stages II, III, and IV hypopharyngeal cancers

One option to treat these cancers is [surgery](#) to remove the pharynx, larynx, and [lymph nodes](#)<sup>10</sup> in the neck. This is usually followed by [radiation](#) alone or radiation with [chemo](#), especially if there's a high chance that the cancer will come back based on what is found during surgery.

Another option is to be treated first with radiation or both radiation and chemo ([chemoradiation](#)). If any cancer remains after treatment, surgery can then be done to try to remove it.

A third option is to get chemotherapy as the first treatment, called *induction chemotherapy*. This is usually followed by radiation therapy or chemoradiation, depending on how much the tumor shrinks. If the tumor does not shrink, surgery might be done. If the lymph nodes in the neck are still enlarged after treatment, surgery can be done to remove them (lymph node dissection).

Cancers that are too big or have spread too far to be completely removed by surgery are often treated with radiation, usually combined with chemo or [cetuximab](#). Another option might be treatment with an immunotherapy drug, either alone or with chemotherapy. Sometimes, if the tumor shrinks enough, surgery of lymph nodes in the neck may be an option. But for many advanced cancers, the goal of treatment is often to stop or slow the growth of the cancer for as long as possible and to help relieve any symptoms it may be causing.

Most experts agree that treatment in a [clinical trial](#)<sup>11</sup> should be considered for advanced stage hypopharyngeal cancers. This way patients can get the best treatment available now and may also get the treatments that are thought to be even better.

## Hyperlinks

1. [www.cancer.org/cancer/laryngeal-and-hypopharyngeal-cancer/detection-diagnosis-staging/staging.html](http://www.cancer.org/cancer/laryngeal-and-hypopharyngeal-cancer/detection-diagnosis-staging/staging.html)
2. [www.cancer.org/cancer/laryngeal-and-hypopharyngeal-cancer/detection-diagnosis-staging/talking-with-doctor.html](http://www.cancer.org/cancer/laryngeal-and-hypopharyngeal-cancer/detection-diagnosis-staging/talking-with-doctor.html)
3. [www.cancer.org/treatment/understanding-your-diagnosis/after-diagnosis/making-treatment-decisions.html](http://www.cancer.org/treatment/understanding-your-diagnosis/after-diagnosis/making-treatment-decisions.html)
4. [www.cancer.org/cancer/cancer-basics/lymph-nodes-and-cancer.html](http://www.cancer.org/cancer/cancer-basics/lymph-nodes-and-cancer.html)
5. [www.cancer.org/cancer/cancer-basics/lymph-nodes-and-cancer.html](http://www.cancer.org/cancer/cancer-basics/lymph-nodes-and-cancer.html)
6. [www.cancer.org/treatment/treatments-and-side-effects/clinical-trials.html](http://www.cancer.org/treatment/treatments-and-side-effects/clinical-trials.html)
7. [www.cancer.org/cancer/laryngeal-and-hypopharyngeal-cancer/detection-diagnosis-staging/hypopharyngeal-staging.html](http://www.cancer.org/cancer/laryngeal-and-hypopharyngeal-cancer/detection-diagnosis-staging/hypopharyngeal-staging.html)
8. [www.cancer.org/cancer/cancer-basics/lymph-nodes-and-cancer.html](http://www.cancer.org/cancer/cancer-basics/lymph-nodes-and-cancer.html)
9. [www.cancer.org/cancer/laryngeal-and-hypopharyngeal-cancer.html](http://www.cancer.org/cancer/laryngeal-and-hypopharyngeal-cancer.html)
10. [www.cancer.org/cancer/cancer-basics/lymph-nodes-and-cancer.html](http://www.cancer.org/cancer/cancer-basics/lymph-nodes-and-cancer.html)
11. [www.cancer.org/treatment/treatments-and-side-effects/clinical-trials.html](http://www.cancer.org/treatment/treatments-and-side-effects/clinical-trials.html)

## References

National Cancer Institute. Hypopharyngeal Cancer Treatment (PDQ®)—Patient Version.

May 11, 2017. Accessed at [www.cancer.gov/types/head-and-neck/patient/hypopharyngeal-treatment-pdq#section/\\_72](http://www.cancer.gov/types/head-and-neck/patient/hypopharyngeal-treatment-pdq#section/_72) on November 9, 2017.

National Cancer Institute. Laryngeal Cancer Treatment (PDQ®)—Patient Version. September 27, 2017. Accessed at [www.cancer.gov/types/head-and-neck/patient/laryngeal-treatment-pdq#section/\\_84](http://www.cancer.gov/types/head-and-neck/patient/laryngeal-treatment-pdq#section/_84) on November 9, 2017.

National Comprehensive Cancer Network. NCCN Clinical Practice Guidelines in Oncology. Head and Neck Cancers. Version 1.2019. Accessed at [https://www.nccn.org/professionals/physician\\_gls/pdf/head-and-neck.pdf](https://www.nccn.org/professionals/physician_gls/pdf/head-and-neck.pdf) on June 19, 2019.

See all references for Laryngeal and Hypopharyngeal Cancer ([www.cancer.org/cancer/laryngeal-and-hypopharyngeal-cancer/references.html](http://www.cancer.org/cancer/laryngeal-and-hypopharyngeal-cancer/references.html))

Last Medical Review: November 27, 2017 Last Revised: June 19, 2019

---

## Treating Recurrent Laryngeal and Hypopharyngeal Cancers

Cancer is called [recurrent](#)<sup>1</sup> when it come backs after treatment. Recurrence can be local (in or near the same place it started) or distant (spread to other parts of the body, like the lungs or bone). Treatment options for patients whose [laryngeal or hypopharyngeal cancers](#)<sup>2</sup> come back after treatment depend mainly on what the first treatment was and where the cancer recurs.

Because these cancer recurrences are hard to treat, patients may want to think about taking part in [clinical trials](#)<sup>3</sup> of newer treatments.

### Local recurrence

Local recurrences in people who have already had limited [surgery](#) such as partial laryngectomy can often be treated with more extensive surgery (such as total laryngectomy). This may be followed by [radiation therapy](#) or chemoradiation (radiation and chemo are given at the same time).

Local recurrence may also be treated with [chemotherapy](#). Chemo may be given along with [cetuximab](#). Or, chemoradiation may be used. [Immunotherapy](#) might also be an option in some cases, either alone or with chemotherapy.

If cancer comes back locally after radiation therapy, the usual treatment is total laryngectomy, but more radiation therapy is sometimes used.

If surgery can't be done, chemo or chemoradiation can be used to help control the cancer and ease any problems it might be causing. (This is called [palliative or supportive care](#)<sup>5</sup>.)

## Distant recurrence

Distant recurrences that have not responded to radiation therapy and surgery are treated with [chemotherapy](#) and/or [targeted therapy](#). Another option might be treatment with an [immunotherapy](#) drug, either alone or with chemotherapy. Chemoradiation may also be used, if a person can tolerate it.

If there are only a few tumors, [surgery](#) may be done. [Radiation](#) or chemo are also options.

Chemo or chemoradiation can be used to help control the cancer and ease any problems it might be causing. (This is called [palliative or supportive care](#)<sup>6</sup>.)

## Hyperlinks

1. [www.cancer.org/treatment/survivorship-during-and-after-treatment/understanding-recurrence.html](http://www.cancer.org/treatment/survivorship-during-and-after-treatment/understanding-recurrence.html)
2. [www.cancer.org/cancer/laryngeal-and-hypopharyngeal-cancer/about/what-is-laryngealand-hypopharyngeal.html](http://www.cancer.org/cancer/laryngeal-and-hypopharyngeal-cancer/about/what-is-laryngealand-hypopharyngeal.html)
3. [www.cancer.org/treatment/treatments-and-side-effects/clinical-trials.html](http://www.cancer.org/treatment/treatments-and-side-effects/clinical-trials.html)
4. [www.cancer.org/treatment/treatments-and-side-effects/palliative-care.html](http://www.cancer.org/treatment/treatments-and-side-effects/palliative-care.html)
5. [www.cancer.org/treatment/treatments-and-side-effects/palliative-care.html](http://www.cancer.org/treatment/treatments-and-side-effects/palliative-care.html)
6. [www.cancer.org/treatment/treatments-and-side-effects/palliative-care.html](http://www.cancer.org/treatment/treatments-and-side-effects/palliative-care.html)
7. [www.cancer.org/treatment/treatments-and-side-effects/palliative-care.html](http://www.cancer.org/treatment/treatments-and-side-effects/palliative-care.html)

## References

National Cancer Institute. Hypopharyngeal Cancer Treatment (PDQ®)—Patient Version.

May 11, 2017. Accessed at [www.cancer.gov/types/head-and-neck/patient/hypopharyngeal-treatment-pdq#section/\\_89](http://www.cancer.gov/types/head-and-neck/patient/hypopharyngeal-treatment-pdq#section/_89) on November 9, 2017.

National Cancer Institute. Laryngeal Cancer Treatment (PDQ®)—Patient Version. September 27, 2017. Accessed at [www.cancer.gov/types/head-and-neck/patient/laryngeal-treatment-pdq#section/\\_119](http://www.cancer.gov/types/head-and-neck/patient/laryngeal-treatment-pdq#section/_119) on November 9, 2017.

National Comprehensive Cancer Network. NCCN Clinical Practice Guidelines in Oncology. Head and Neck Cancers. Version 1.2019. Accessed at [https://www.nccn.org/professionals/physician\\_gls/pdf/head-and-neck.pdf](https://www.nccn.org/professionals/physician_gls/pdf/head-and-neck.pdf) on June 19, 2019.

See all references for Laryngeal and Hypopharyngeal Cancer ([www.cancer.org/cancer/laryngeal-and-hypopharyngeal-cancer/references.html](http://www.cancer.org/cancer/laryngeal-and-hypopharyngeal-cancer/references.html))

Last Medical Review: November 27, 2017 Last Revised: June 19, 2019

### **Written by**

The American Cancer Society medical and editorial content team ([www.cancer.org/cancer/acs-medical-content-and-news-staff.html](http://www.cancer.org/cancer/acs-medical-content-and-news-staff.html))

Our team is made up of doctors and oncology certified nurses with deep knowledge of cancer care as well as journalists, editors, and translators with extensive experience in medical writing.

American Cancer Society medical information is copyrighted material. For reprint requests, please see our Content Usage Policy ([www.cancer.org/about-us/policies/content-usage.html](http://www.cancer.org/about-us/policies/content-usage.html)).

**cancer.org | 1.800.227.2345**