Treating Laryngeal and Hypopharyngeal Cancer

General treatment information

Once your cancer is diagnosed and staged, your cancer care team will discuss your treatment options with you. Choosing a treatment plan is a major decision, so it is important to take time and think about all of your choices.

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.

Treatment for laryngeal or hypopharyngeal cancer may include:

- Surgery
- Radiation therapy
- Chemotherapy
- Targeted therapy

Depending on the stage of the cancer and your overall health, different treatment options may be used alone or in combination. See Treating laryngeal and hypopharyngeal cancers by stage for common treatment plans.

Based on these 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.

It is important to discuss all of your treatment options, including their goals and possible side effects, with your doctors to help make the decision that best fits your needs. It’s also very important to ask questions if there is anything you’re not sure about. You can find some good questions to ask in the section What should you ask your doctor about laryngeal or hypopharyngeal cancer?

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

A major consideration in all treatments is to try to save your larynx and voice whenever possible. Most experts don’t recommend surgery that will totally remove the larynx unless there are no other options.

If the cancer is too advanced to be cured, the goal may be to remove or destroy as much of the cancer as reasonable to keep the tumor from growing, spreading, or returning for as long as possible.

Some of the treatments above 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 is not expected to cure the cancer.

No matter which type of treatment you get, it is important for you to understand the goals of treatment beforehand. Be sure to discuss this with your doctor so you will have an idea of what to expect.

**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 are 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. You can also call our clinical trials matching service at 1-800-303-5691 for a list of studies that meet your
medical needs, or see the Clinical Trials section to learn more.

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 dangerous.

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. See the Complementary and Alternative Medicine section to learn more.

Help getting through cancer treatment

Your cancer care team will be your first source of information and support, but there are other resources for help when you need it. Hospital- or clinic-based support services are 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, support groups, 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 on call 24 hours a day, every day.

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 patients with laryngeal and hypopharyngeal cancers. Depending on the stage and location of the cancer, different operations may be used to remove the cancer and some nearby parts of the larynx or hypopharynx.

After the cancer is removed, reconstructive surgery may be done to help restore the appearance and function of the affected areas.

Vocal cord stripping

In this technique, the doctor uses a long surgical instrument to strip away the superficial layers of tissue on the vocal cords. This can be done to biopsy and treat some stage 0 cancers (carcinoma in situ) of the vocal cords. Most people can speak normally again after recovering from this operation.

Laser surgery

Lasers can be used to treat some stage 0 (carcinoma in situ) and T1 larynx cancers. An endoscope is passed down your throat to locate the tumor, which is then either vaporized or excised (cut out) using a high-intensity laser on the tip of the endoscope.

A drawback of vaporization is that it leaves nothing behind that can be sampled to look at under the microscope. If the laser is used to remove part of a vocal cord, it may result in a hoarse voice.

Cordectomy

For a cordectomy 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 result in hoarseness. Normal speech is no longer possible if both vocal cords are removed.

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 remove the entire cancer while leaving behind as much of the larynx as possible.

In a supraglottic laryngectomy, only the portion 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 (glottis), the surgeon may be able to remove the cancer by taking out only one vocal cord and leaving the other behind. This operation, known as a hemilaryngectomy, will allow some speech to remain.

**Total laryngectomy:** In this procedure, your entire larynx is removed. The windpipe is then brought up through the skin of the front of the neck as a stoma (or hole) that you breathe through (see the picture below). This is known as a tracheostomy. Once the entire larynx is removed, you can no longer speak normally, but you can learn other ways of speaking (see [What happens after treatment for laryngeal and hypopharyngeal cancers?](#)). The connection between the throat and the esophagus is usually not affected, so after recovering from surgery, you can swallow food and liquids just as you did before the operation.
Total or partial pharyngectomy

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

Reconstructive surgery

These operations may be done to help restore the structure or function of areas affected by more extensive surgeries 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 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 options to reconstruct the area of your throat. Tissues from other areas of your body such as a piece of intestine or a piece of arm muscle can be used to replace parts of your throat.

**Lymph node removal**

Cancers of the larynx and hypopharynx may spread to the lymph nodes 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.

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. Sometimes doctors will try to remove less normal tissue to try to keep your shoulder and neck functioning normally.

**Tracheostomy/tracheotomy**

A tracheostomy (tracheotomy) is an incision (hole) made in the trachea (windpipe) through the front of the neck to help a person breathe by letting air in and out of the lungs. It may be used in different circumstances.

After a partial laryngectomy or pharyngectomy, a temporary tracheostomy (using a small plastic tube known as a **trach tube**) may be put in place to help protect your airway while you recover from surgery. The tube stays in place for a short time, and is then removed later when it is no longer needed.

As described above, a permanent tracheostomy is needed after a total laryngectomy. In this procedure, the opening in the trachea is connected to a hole in the skin in the front of the neck. A trach tube or stoma cover may be needed to help keep the tracheostomy open.
If a laryngeal or hypopharyngeal cancer is blocking the windpipe and is too large 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 is placed through the skin and muscle of your abdomen directly 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 is placed through endoscopy, it is called a *percutaneous endoscopic gastrostomy*, or *PEG tube*. Another option is to put the tube in place during an operation. Once in place, the tube can deliver nutrition directly into the stomach.

Often, the gastrostomy tube is only needed for a short time to help you get enough nutrition during radiation and/or chemotherapy. The tube can be removed once your swallowing improves after treatment. It is important to keep swallowing even when getting most of your nutrition through a G tube to keep those muscles active and increase the likelihood that you will return 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 [What happens after treatment for laryngeal and hypopharyngeal cancers?](https://www.cancer.org/cancer/larynx-cancer/treatment/radiotherapy.html) 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), which in some cases could 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 in some cases.

Laryngectomy and pharyngectomy can also lead to the development of a fistula (an abnormal opening between 2 areas that are not normally connected). This may require surgery to correct.

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

Rarely, these operations can lead to problems with the thyroid and/or parathyroid glands, which are in the front of the neck. Damage to the thyroid gland can lead to hypothyroidism, where the patient feels very tired and sluggish. Damage to the parathyroid gland can lead to problems with low calcium levels, which can cause muscle spasms and irregular heartbeat. These problems can be treated with medicines.

For more general information on surgery as a treatment for cancer, see Cancer Surgery.

- References
  See all references for Laryngeal and Hypopharyngeal Cancer

Last Medical Review: April 8, 2014 Last Revised: August 8, 2016

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**Radiation Therapy for Laryngeal and Hypopharyngeal Cancers**

Radiation therapy uses high-energy x-rays, gamma rays, or particles to kill cancer cells. It may be used in different situations for laryngeal and hypopharyngeal cancers.

- It can be used as the main (primary) treatment for some early stage laryngeal and hypopharyngeal cancers. If the cancer is small, it can often be destroyed by radiation without surgery. This treatment can help to preserve better voice quality.
• It can be used to treat some patients whose health is too poor for surgery.
• It may be used after a cancer is removed with surgery, 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*.
• It can be used to ease symptoms of advanced laryngeal and hypopharyngeal cancer such as pain, bleeding, trouble swallowing, and problems caused when cancer spreads to the bones.

Often, chemotherapy is given along with the radiation. This combination, called *chemoradiation*, can be more effective than radiation alone, but it also has more side effects. (See [Chemotherapy for laryngeal and hypopharyngeal cancer](#) for more details.)

### 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 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 take careful measurements to determine the correct angles for aiming the radiation beams and the proper dose of radiation. 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, although the setup time – getting you into place for treatment – usually takes longer.

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 for good is the best effective strategy to improve survival.

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 doses have also been studied:

- *Hyperfractionation* means giving the total radiation dose in a larger number of doses (2 smaller doses per day instead of 1 larger dose, for example).
- *Accelerated fractionation* means that the radiation treatment is completed faster (6 weeks instead of 7 weeks, for instance).
Hyperfractionation and accelerated fractionation schedules may reduce the risk of laryngeal and hypopharyngeal cancer coming back in or near the place it started (called local recurrence) and may help some patients live longer. The drawback is that these schedules also tend to have more severe side effects.

Modern techniques 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 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, but the beams converge 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. In addition to 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 placed directly into or near the cancer. Brachytherapy may be used alone or combined with external beam radiation therapy. It is 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 in the mouth and throat that can make eating and drinking very hard. This can lead to weight loss and malnutrition. The sores heal with time after the radiation has stopped, but some people continue to have problems swallowing long after treatment ends.

Other side effects 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 of the larynx
● Tiredness

Most of these side effects go away after a short while. 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 can affect your teeth, which could worsen any existing dental problems. Depending on the radiation plan and the condition of your teeth, some or all of your teeth may need to be removed before starting treatment.

Radiation aimed at the head and neck might damage the salivary glands, leading to dry mouth that does not improve with time. In addition to discomfort and problems swallowing, a dry mouth can lead to tooth decay. People treated with radiation to the neck and throat must pay close attention to their oral health.

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 occurs, the patient may need to be treated with a tracheostomy or laryngectomy.

For more information about radiation therapy, see the Radiation Therapy section of our website, or A Guide to Radiation Therapy.

● References
See all references for Laryngeal and Hypopharyngeal Cancer

Last Medical Review: April 8, 2014 Last Revised: August 8, 2016

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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 beyond where they started.

Chemo may be used in different situations for laryngeal and hypopharyngeal cancers.

- It is often given 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 retain the ability to speak.
- It may be used (as part of chemoradiation) after a cancer is removed with surgery, 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.
- It is sometimes used to help relieve symptoms from cancers that are too large or have spread too far to be completely removed with surgery.

Conventional chemotherapy

Standard chemo drugs work by attacking cells that are dividing quickly, including cancer cells. The chemo drugs used most often for cancers of the larynx and hypopharynx include:

- Cisplatin
- Carboplatin
- 5-fluorouracil (5-FU)
- Docetaxel (Taxotere®)
- Paclitaxel (Taxol®)
- Bleomycin
- Methotrexate
- Ifosfamide

Treatment may involve the use of a single drug or 2 or more in combination. Common combinations include cisplatin with 5-FU and cisplatin, docetaxel, and 5-FU. Sometimes chemo is combined with the targeted drug cetuximab.

Doctors give chemo in cycles, with each period of treatment followed by a rest period to give the body time to recover. Each cycle typically 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. It can be used in different situations.
- It may be an option as the main treatment instead of surgery 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 then be recommended.
- It may be used after surgery to try to lower the risk that the cancer will come back. This may be recommended if cancer is found at the edges (margins) of the removed surgery specimen, or if the cancer has other features that make it more likely to come back after surgery.

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

**Possible side effects of chemotherapy**

Chemo drugs attack cells that are dividing quickly, which is why they work against cancer cells. But other cells in the body, 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, which can lead to side effects. Side effects depend on the specific drugs used, their dose, and the length of treatment. 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 example, 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 be permanent. 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 chemotherapy. For example, many drugs can help prevent or treat nausea and vomiting.

For more information on chemotherapy, see the [Chemotherapy](#) section of our website.

- **References**
  
  [See all references for Laryngeal and Hypopharyngeal Cancer](#)

Last Medical Review: April 8, 2014 Last Revised: August 8, 2016

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**Targeted Therapy for Laryngeal and Hypopharyngeal Cancers**

As researchers have learned more about the changes in cells that cause cancer, they have 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 chemotherapy doesn’t. They also tend to have different (and less severe) side effects.

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

Cetuximab may be combined with [radiation therapy](#) for some earlier stage cancers. For more advanced cancers, it may be combined with standard chemotherapy drugs such as cisplatin, 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.

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

For more information about targeted therapy see [Targeted Therapy](#).

- **References**
  [See all references for Laryngeal and Hypopharyngeal Cancer](#)

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**Treating Laryngeal and Hypopharyngeal Cancers by Stage**

Most of the time, the treatment of laryngeal or hypopharyngeal cancer is based on its stage – how far it has spread in the body. But other factors, such as your overall health, may also affect treatment options. Talk to your doctor if you have any questions about the treatment plan he or she recommends.

**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 vocal cord stripping, laser surgery, or radiation therapy. The patient is then watched closely to see if the cancer returns. If the cancer comes back after stripping or laser surgery, radiation can be used.

Almost all people at this stage can be cured without extensive surgery. But it is important for them to realize that if they smoke, continuing to do so increases the risk
that a new cancer 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. Voice results tend to be better with radiation therapy than with partial laryngectomy, and the complication rate tends to be lower for radiation treatment. Many doctors use radiation therapy for smaller cancers, only using surgery for cancers that come back after 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 cancerous vocal cord, 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 surgery specimen). If you need further treatment after surgery, your options might include radiation therapy, chemoradiation, or more extensive surgery.

Supraglottic cancers are more likely to spread to the neck lymph nodes, so the nodes are often treated as well. If you are having surgery for your tumor, then the surgeon will also probably remove lymph nodes from your neck. 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, further treatment such as radiation therapy, chemoradiation, or more extensive surgery may be recommended.

**Stage III and IV laryngeal cancers**

Stage III and IV laryngeal cancers often require treatment with some combination of surgery, radiation, and/or chemotherapy.

The main options for initial treatment are surgery or chemotherapy with radiation. Radiation therapy alone (or with the targeted drug cetuximab/Erlotinib) may be an option for people who cannot tolerate more intensive treatments.

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

These cancers have a higher risk of spreading to nearby lymph nodes in the neck than earlier-stage cancers, 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, particularly 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 hard to take, but it works as well as total laryngectomy in treating the cancer, while giving 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 approach may be surgery to remove the larynx.

Another option may be to start with chemotherapy alone, which also is known as 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. But because some studies have shown better results when radiation is part of the initial treatment, not all doctors agree with the approach of starting with chemotherapy alone.

Cancers that are too large or have spread too far to be completely removed by surgery are often treated with radiation, usually combined with chemotherapy or the targeted drug cetuximab (Erbitux). 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.

**Hypopharyngeal cancers**

These cancers are often harder to treat than laryngeal cancers. Because they do not cause symptoms early, most are already at an advanced stage when they are diagnosed. Tumors in this region also have a high likelihood of spreading to the lymph nodes, even when there is no obvious mass in the neck. Because of this risk, 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 and/or radiation.

Surgery includes removing all or part of the pharynx (throat) as well as lymph nodes on both sides of the neck. The larynx often needs to be removed as well. People who have a high chance of the cancer returning (based on what is 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 is any cancer remaining, surgery is done.

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

There are 3 main options to treat these cancers.

The first is surgery to remove the pharynx, larynx, and lymph nodes in the neck. This is usually followed by radiation alone or radiation with chemo, especially if there is a high chance of the cancer returning (based on what is found during surgery).

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

The third option is to get chemotherapy as the first treatment, also known as 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 remain enlarged after treatment, they can be removed with a lymph node dissection.

Cancers that are too large or have spread too far to be completely removed by surgery are often treated with radiation, usually combined with chemo or cetuximab. 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.

- References

  See all references for Laryngeal and Hypopharyngeal Cancer

Last Medical Review: April 8, 2014 Last Revised: August 8, 2016
Treating Recurrent Laryngeal and Hypopharyngeal Cancers

Cancer is called *recurrent* when it come backs after treatment. Recurrence can be local (in or near the same place it started) or distant (spread to organs such as the lungs or bone). Treatment options for patients whose laryngeal or hypopharyngeal cancers come back after treatment depend mainly on what the initial treatment was and on where the cancer recurs.

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) or with radiation therapy. If cancer comes back locally after radiation therapy, the usual treatment is total laryngectomy, but additional radiation therapy is sometimes used. Radiation in these cases is generally delivered by external beam. However, a special way of giving external beam radiation called stereotactic radiosurgery is also being studied. This approach gives high doses of radiation over just a few sessions (instead of weeks). Not all facilities have the expertise to be able to deliver stereotactic radiosurgery.

For distant recurrences and for local recurrences that have not responded to radiation therapy and surgery, the main treatment is chemotherapy and/or targeted therapy, sometimes along with radiation, if a person can tolerate it. If chemo is no longer working, a newer option might be treatment with an immunotherapy drug such as pembrolizumab (Keytruda) or nivolumab (Opdivo). These drugs can help the body’s own immune system attack the cancer.

Because these cancers are often hard to treat, patients may want to consider taking part in clinical trials of newer treatments as well.

- References

See all references for Laryngeal and Hypopharyngeal Cancer

Last Medical Review: April 8, 2014 Last Revised: March 2, 2017