Laryngeal and Hypopharyngeal Cancer Early Detection, Diagnosis, and Staging

Detection and Diagnosis

Finding cancer early often allows for more treatment options. Some early cancers may have signs and symptoms that can be noticed, but that's not always the case.

- Can Laryngeal and Hypopharyngeal Cancers Be Found Early?
- Signs and Symptoms of Laryngeal and Hypopharyngeal Cancers
- Tests for Laryngeal and Hypopharyngeal Cancers

Stages and Outlook (Prognosis)

After a cancer diagnosis, staging provides important information about the extent of cancer in the body and anticipated response to treatment.

- Laryngeal Cancer Stages
- Hypopharyngeal Cancer Stages
- Survival Rates for Laryngeal and Hypopharyngeal Cancers

Questions to Ask About Laryngeal and Hypopharyngeal Cancer

Here are some questions you can ask your cancer care team to help you better understand your cancer diagnosis and treatment options.

- Questions to Ask Your Doctor About Laryngeal or Hypopharyngeal Cancer
Can Laryngeal and Hypopharyngeal Cancers Be Found Early?

Screening is testing for diseases like cancer in people without any symptoms. Screening tests may find some types of cancer early, when treatment is most likely to be effective.

But for now there is no simple screening test for laryngeal and hypopharyngeal cancers. These cancers are often hard to find and diagnose without complex tests. Because the cancers are not common, and the tests require specialized doctors, neither the American Cancer Society nor any other group recommends routine screening for these cancers.

Still, many laryngeal and some hypopharyngeal cancers can be found early. They usually cause symptoms, such as voice changes, which are described in Signs and symptoms of laryngeal and hypopharyngeal cancers. Talk to your doctor if you have any of these symptoms. Many of the symptoms of laryngeal and hypopharyngeal cancers are more often caused by less serious, benign (non-cancerous) problems, or even other cancers. Still, it is important to see a doctor to find out what is causing your symptoms. The sooner the cause is found, the sooner it can be treated, if needed.

References


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In most cases, laryngeal and hypopharyngeal cancers are found because of the symptoms they cause.

**Hoarseness or voice changes**

Laryngeal cancers that form on the vocal cords (glottis) often cause hoarseness or a change in the voice. This can lead to them being found at a very early stage. People who have voice changes (like hoarseness) that do not improve within 2 weeks should see their health care provider right away.

For cancers that don’t start on the vocal cords, hoarseness occurs only after these cancers reach a later stage or have spread to the vocal cords. These cancers are sometimes not found until they have spread to the lymph nodes and the person notices a growing mass in the neck.

**Other symptoms**

Cancers that start in the area of the larynx above the vocal cords (supraglottis), the area below the vocal cords (subglottis), or the hypopharynx do not usually cause voice changes, and are therefore more often found at later stages.

Symptoms of these cancers may include:

- A sore throat that does not go away
- Constant coughing
- Pain when swallowing
- Trouble swallowing
- Ear pain
- Trouble breathing
- Weight loss
- A lump or mass in the neck (due to spread of the cancer to nearby lymph nodes)

Many of these symptoms are more likely to be caused by conditions other than laryngeal or hypopharyngeal cancer. Still, if you have any of these symptoms, it is very important to have them checked by a doctor so that the cause can be found and treated, if needed.

**References**
Tests for Laryngeal and Hypopharyngeal Cancers

Laryngeal and hypopharyngeal cancers are usually found because of signs or symptoms a person is having. If cancer is suspected, tests will be needed to confirm the diagnosis. Getting a diagnosis of laryngeal or hypopharyngeal cancer when you haven't had symptoms is rare. When it does happen, the cancer is usually found because of tests done to check other medical problems.

Exams and tests for laryngeal or hypopharyngeal cancer

If you have signs or symptoms that suggest you might have a cancer of the larynx or hypopharynx, your doctor will need to do exams or tests to be sure.

Medical history and physical exam

Your doctor will ask you about your symptoms, possible risk factors, family history, and other medical problems. A physical exam can help find signs of possible cancer or other diseases. Your doctor will pay very close attention to your head and neck, looking for abnormal areas in your mouth or throat, as well as swollen lymph nodes in your neck.

Exam by a specialist

If your doctor suspects a cancer of the larynx or hypopharynx, you will be referred to an ear, nose, and throat (ENT) doctor, also called an otolaryngologist. This doctor will do a more complete exam of your head and neck. This will include an inside look at the larynx and hypopharynx, known as laryngoscopy, which can be done in 2 ways:

- **Direct (flexible) laryngoscopy**: To do this, the doctor puts a fiber-optic
laryngoscope (a thin, flexible, lighted tube) in through your mouth or nose to look at your larynx and nearby areas. Biopsies can be done through the scope (covered below).

- **Indirect laryngoscopy:** The doctor uses special small mirrors that are put into your mouth to look at your larynx and nearby areas.

Both types of exams can be done in the doctor’s office. For either type of exam, the doctor may spray the back of your throat with numbing medicine to help make the exam easier.

People with laryngeal or hypopharyngeal cancer also have a higher risk for other cancers in the head and neck region, so the nasopharynx (part of the throat behind the nose), mouth, tongue, and the neck are also carefully looked at and checked for any signs of cancer.

**Panendoscopy**

Panendoscopy[^4] is a procedure that combines laryngoscopy, esophagoscopy, and (at times) bronchoscopy. This lets the doctor thoroughly examine the entire area around the larynx and hypopharynx, including the esophagus (swallowing tube) and trachea (windpipe).

This exam is usually done in an operating room while you are under general anesthesia. (This means drugs are used to put you into a deep sleep.) The doctor uses a rigid laryngoscope to look for tumors in the larynx and hypopharynx. Other parts of the mouth, nose, and throat are examined as well. The doctor may also use an endoscope to look into the esophagus or a bronchoscope to look into the trachea (windpipe).

Your doctor will look at these areas through the scope(s) to find any tumors, see how large they are, and see how far they have spread to nearby areas. The doctor might also take out (biopsy) small tissue samples from any tumors or other changed areas using special tools put in through the scopes.

**Biopsies to diagnose laryngeal and hypopharyngeal cancers**

In a biopsy, the doctor removes a sample of tissue to be looked at under a microscope. It’s the only way to be sure of a diagnosis of laryngeal or hypopharyngeal cancer. There are many different types of biopsies. See Testing Biopsy and Cytology Specimens for Cancer[^5] to learn more about different kinds of biopsies, what the doctor looks for, how the tissue is tested to diagnosis cancer, and what the results will tell you.
Endoscopic biopsy

The larynx and hypopharynx are deep inside the neck, so taking out samples for biopsy can be complex. Biopsies of these areas are done in the operating room while you are under general anesthesia (asleep). The surgeon uses special instruments through an endoscope to remove small pieces of tissue.

Fine needle aspiration (FNA) biopsy

This type of biopsy isn't used to remove samples in the larynx or hypopharynx, but it may be done to find the cause of an swollen lymph node in the neck. A thin, hollow needle is put through the skin into the mass (or tumor) to get cells for a biopsy. The cells are then looked at under a microscope. If the FNA finds cancer, the pathologist (the doctor examining the samples) can often tell what type of cancer it is. If the cancer cells look like they might have come from the larynx or hypopharynx, an endoscopic exam and biopsy of these areas will be needed.

If the FNA doesn't find cancer, it only means that cancer was not found in that lymph node. There could still be cancer in other places. If you’re having symptoms that might be from a laryngeal or hypopharyngeal cancer, you could still need other tests to find the cause of the symptoms.

FNA biopsies may also be useful in some patients already known to have laryngeal or hypopharyngeal cancer. If the person has a lump in the neck, an FNA can show if the mass is due to spread of the cancer. FNA may also be used in patients whose cancer has been treated by surgery and/or radiation therapy, to help find out if a neck mass in the treated area is scar tissue or if it’s a return (recurrence) of the cancer.

Imaging tests

Imaging tests use x-rays, magnetic fields, or radioactive substances to create pictures of the inside of your body. Imaging tests are not used to diagnose laryngeal or hypopharyngeal cancers, but they’re done for a number of reasons after a cancer diagnosis, such as:

- To help look for a tumor if one is suspected
- To learn how far cancer may have spread
- To help determine if treatment is working
- To look for signs that the cancer has come back after treatment
Computed tomography (CT) scan

The CT scan (also known as a CAT scan) uses x-rays to make detailed cross-sectional images of your body. Instead of taking one picture like a standard x-ray, a CT scanner takes many pictures as it rotates around you. A computer then combines these pictures into an image of a slice of your body. Unlike a regular x-ray, a CT scan creates detailed images of the soft tissues and organs in the body.

This test can help your doctor determine the size of the tumor, see if it's growing into nearby tissues, and find out if it has spread to lymph nodes in your neck. It may also be done to look for the spread of cancer to your lungs.

Magnetic resonance imaging (MRI) scan

MRI scans use radio waves and strong magnets instead of x-rays. The energy from the radio waves is absorbed and then released in a pattern formed by the type of tissue and by certain diseases. A computer translates the pattern into a very detailed image of parts of your body.

Because it provides a very detailed picture, an MRI scan may be done to look for spread of the cancer in the neck. These scans can be very useful in looking at other areas of the body, too.

Barium swallow

This is often the first test done if someone is having a problem with swallowing. For this test, you drink a chalky liquid called barium to coat the walls of the throat and esophagus (swallowing tube). A series of x-rays of the throat and esophagus is taken as you swallow. The barium can help show problems in the throat.

Chest x-ray

A chest x-ray may be done to see if the cancer has spread to the lungs. If any suspicious spots are seen on the chest x-ray, a CT scan of the chest may be needed to get a more detailed picture.

Positron emission tomography (PET) scan

For a PET scan, a form of radioactive sugar (known as fluorodeoxyglucose or FDG) is injected into the blood. The amount of radioactivity used is very low. Cancer cells grow quickly, so they absorb large amounts of the radioactive sugar. After about an hour, you
will be moved onto a table in the PET scanner. A special camera creates a picture of areas of radioactivity in your body. The picture is not finely detailed like a CT or MRI scan, but it provides helpful information about your whole body. Some machines can do both a PET and CT scan at the same time (PET/CT scan). This lets the doctor compare areas of higher radioactivity on the PET with the more detailed pictures of that area on the CT.

A PET scan may be used to look for possible areas of cancer spread, especially if there is a good chance that the cancer is more advanced. This test can also be used to help tell if a suspicious area seen on another imaging test is cancer or not.

**Other tests**

Other tests may be done as part of a workup in people diagnosed with laryngeal or hypopharyngeal cancer. These tests are not used to diagnose the cancer, but they may be done to see if a person is healthy enough for certain treatments, like surgery\(^\text{15}\) or chemotherapy\(^\text{16}\).

Blood tests\(^\text{17}\) are often done to see how well your liver and kidneys are working, and to help evaluate your overall health before treatment. Blood tests are also needed if you are getting chemo because it can affect the levels of blood cells in your body.

If surgery is planned, you might also get an electrocardiogram (EKG) to make sure your heart is working well. Some people having surgery also may need tests of their lung function. These are known as pulmonary function tests (PFTs).

**Hyperlinks**

3. [https://www.cancer.org/content/cancer/en/treatment/understanding-your-diagnosis/tests/endoscopy.html](https://www.cancer.org/content/cancer/en/treatment/understanding-your-diagnosis/tests/endoscopy.html)
4. [https://www.cancer.org/content/cancer/en/treatment/understanding-your-diagnosis/tests/endoscopy.html](https://www.cancer.org/content/cancer/en/treatment/understanding-your-diagnosis/tests/endoscopy.html)
17. https://www.cancer.org/content/cancer/en/treatment/understanding-your-diagnosis/tests/understanding-your-lab-test-results.html

References


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

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**Laryngeal Cancer Stages**

After someone is diagnosed with laryngeal cancer, doctors will try to figure out if it has spread, and if so, how far. This process is called staging. The stage of a cancer describes how much cancer is in the body. It helps determine how serious the cancer is and how best to treat it. Doctors also use a cancer’s stage when talking about survival statistics.

The earliest stage of laryngeal cancer is stage 0, also known as carcinoma in situ (CIS). The other main stages range from I (1) through IV (4). Some stages are split further, using capital letters (A, B, etc.). As a rule, the lower the number, the less the cancer has spread. A higher number, such as stage IV, means cancer has spread more. And within a stage, an earlier letter means a lower stage. Although each person’s cancer experience is unique, cancers with similar stages tend to have a similar outlook and are often treated in much the same way.

**How is the stage determined?**

The staging system most often used for laryngeal cancer is the American Joint Committee on Cancer (AJCC) TNM system, which is based on 3 key pieces of information:

- **The extent of the main tumor (T):** Where is the tumor? How far has it grown into the larynx and nearby structures? Has it affected vocal cord movement?
- **The spread to nearby lymph nodes (N):** Has the cancer spread to nearby lymph nodes in the neck? If so, how many are affected, and how large are they?
- **The spread (metastasis) to distant sites (M):** Has the cancer spread to distant
numbers or letters after T, N, and M provide more details about each of these factors. Higher numbers mean the cancer is more advanced.

Once the T, N, and M categories of the cancer have been determined, this information is combined in a process called stage grouping to assign an overall stage. For more information, see Cancer Staging 2.

The system described below is the most recent AJCC system, effective January 2018.

Laryngeal cancer is typically given a clinical stage based on the results of any exams, biopsies, and imaging tests that might have been done (as described in How Are Laryngeal and Hypopharyngeal Cancers Diagnosed 3). If surgery has been done, the pathologic stage (also called the surgical stage) can be determined.

The stages of laryngeal cancer are slightly different, based on which part of the larynx the cancer starts in:

- The supraglottis (the area above the vocal cords)
- The glottis (the area that includes the vocal cords)
- The subglottis (the area below the vocal cords)

Laryngeal cancer staging can be complex, so ask your doctor to explain it to you in a way you understand.

**Stages of supraglottic laryngeal cancer**

<table>
<thead>
<tr>
<th>AJCC stage</th>
<th>Stage grouping</th>
<th>Stage description*</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Tis N0 M0</td>
<td>The tumor is only in the top layer of cells lining the inside of the larynx and has not grown any deeper (Tis). The cancer has not spread to nearby lymph nodes (N0) or to distant parts of the body (M0).</td>
</tr>
<tr>
<td>I</td>
<td>T1 N0 M0</td>
<td>The tumor has grown deeper, but it is only in one part of the supraglottis, and the vocal cords move normally (T1).</td>
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<tr>
<td>Stage</td>
<td>Tumor Size</td>
<td>Lymph Node Status</td>
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<tr>
<td>IIA</td>
<td>T2</td>
<td>N0 M0</td>
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<tr>
<td>IIIB</td>
<td>T3</td>
<td>N0 M0</td>
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<tr>
<td>OR</td>
<td>T1 to T3</td>
<td>N1 M0</td>
</tr>
<tr>
<td>IVA</td>
<td>T4a</td>
<td>N0 or N1 M0</td>
</tr>
<tr>
<td>OR</td>
<td>T1-T4a N2</td>
<td></td>
</tr>
<tr>
<td>Stage</td>
<td>Description</td>
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<tr>
<td><strong>M0</strong></td>
<td>outside the larynx (as far as moderately advanced disease), and it might or might not have affected a vocal cord (T1 to T4a). The cancer is N2:</td>
<td></td>
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<tr>
<td></td>
<td>• It has spread to a single lymph node on the same side of the neck as the tumor, which is larger than 3 centimeters (cm) but no larger than 6 cm across, OR</td>
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<tr>
<td></td>
<td>• It has spread to more than one lymph node on the same side of the neck as the tumor, none of which is larger than 6 cm across, OR</td>
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<td></td>
<td>• It has spread to at least one lymph node on the other side of the neck, none of which is larger than 6 cm across.</td>
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<td></td>
<td>The cancer has not spread to distant parts of the body (M0).</td>
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<tr>
<td><strong>IVB</strong></td>
<td>The tumor is growing into the area in front of the spine in the neck (the prevertebral space), surrounds a carotid artery, or is growing down into the space between the lungs. This is also known as very advanced local disease (T4b).</td>
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<tr>
<td></td>
<td>The cancer might or might not have spread to nearby lymph nodes (any N). It has not spread to distant parts of the body (M0).</td>
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<tr>
<td><strong>IVC</strong></td>
<td>The tumor might or might not have grown into structures outside the larynx, and it might or might not have affected a vocal cord (any T).</td>
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<tr>
<td></td>
<td>The cancer has spread to at least one lymph node that is larger than 6 cm across, OR it has spread to a lymph node and then grown outside of the lymph node (N3). It has not spread to distant parts of the body (M0).</td>
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<tr>
<td></td>
<td>The tumor might or might not have spread to nearby lymph nodes (any N). The cancer has spread to distant parts of the body (M1).</td>
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</tbody>
</table>
* The following additional categories are not listed on the table above:

- TX: Main tumor cannot be assessed due to lack of information.
- NX: Regional lymph nodes cannot be assessed due to lack of information.

### Stages of glottic laryngeal cancer

<table>
<thead>
<tr>
<th>AJCC stage</th>
<th>Stage grouping</th>
<th>Stage description*</th>
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</thead>
<tbody>
<tr>
<td>0</td>
<td>Tis N0 M0</td>
<td>The tumor is only in the top layer of cells lining the inside of the larynx and has not grown any deeper (Tis). The cancer has not spread to nearby lymph nodes (N0) or to distant parts of the body (M0).</td>
</tr>
<tr>
<td>I</td>
<td>T1 N0 M0</td>
<td>The tumor has grown deeper, but it is only in the vocal cords, and they move normally (T1). The cancer has not spread to nearby lymph nodes (N0) or to distant parts of the body (M0).</td>
</tr>
<tr>
<td>II</td>
<td>T2 N0 M0</td>
<td>The tumor has grown into the supraglottis or subglottis, and/or the vocal cords do not move normally (T2). The cancer has not spread to nearby lymph nodes (N0) or to distant parts of the body (M0).</td>
</tr>
<tr>
<td>III</td>
<td>T3 N0 M0</td>
<td>The tumor is still only in the larynx, but it has caused a vocal cord to stop moving, OR the tumor is growing into the paraglottic space, OR the tumor is growing into the inner part of the thyroid cartilage (firm tissue that separates the thyroid gland from the front of the larynx) (T3). The cancer has not spread to nearby lymph nodes (N0) or to distant parts of the body (M0).</td>
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<tr>
<td>OR</td>
<td>T1 to T3 N1 M0</td>
<td>The tumor might or might not have grown into structures just outside the larynx, and it might or might not have affected a vocal cord (T1 to T3).</td>
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<tr>
<td>Stage</td>
<td>Description</td>
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<tr>
<td>IVA</td>
<td>T4a N0 or N1 M0</td>
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<td></td>
<td>The tumor has grown through the thyroid cartilage and/or is growing into tissues beyond the larynx (such as the thyroid gland, trachea, cricoid cartilage, esophagus, tongue muscles, or neck muscles). This is also known as moderately advanced local disease (T4a). The cancer has not spread to nearby lymph nodes (N0), or it has spread to a single lymph node on the same side of the neck as the tumor, which is no larger than 3 centimeters (cm) across (N1). The cancer has not spread to distant parts of the body (M0).</td>
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<tr>
<td>OR</td>
<td>T1-T4a N2 M0</td>
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<tr>
<td></td>
<td>The tumor might or might not have grown into structures outside the larynx (as far as moderately advanced disease), and it might or might not have affected a vocal cord (T1 to T4a). The cancer is N2:</td>
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<td></td>
<td>- It has spread to a single lymph node on the same side of the neck as the tumor, which is larger than 3 centimeters (cm) but no larger than 6 cm across, OR</td>
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<td></td>
<td>- It has spread to more than one lymph node on the same side of the neck as the tumor, none of which is larger than 6 cm across, OR</td>
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<td></td>
<td>- It has spread to at least one lymph node on the other side of the neck, none of which is larger than 6 cm across.</td>
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<td></td>
<td>The cancer has not spread to distant parts of the body (M0).</td>
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<tr>
<td>IVB</td>
<td>T4b Any N M0</td>
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<tr>
<td></td>
<td>The tumor is growing into the area in front of the spine in the neck (the prevertebral space), surrounds a carotid artery, or is growing down into the space between the lungs. This is also known as very advanced local disease (T4b). The cancer might or might not have spread to nearby lymph nodes (any N). It has not spread to distant parts of the body (M0).</td>
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</table>
Any T N3 M0

- The tumor might or might not have grown into structures outside the larynx, and it might or might not have affected a vocal cord (any T).
- The cancer has spread to at least one lymph node that is larger than 6 cm across, OR it has spread to a lymph node and then grown outside of the lymph node (N3). It has not spread to distant parts of the body (M0).

IVC Any T Any N M1

- The tumor might or might not have grown into structures outside the larynx, and it might or might not have affected a vocal cord (any T).
- The cancer might or might not have spread to nearby lymph nodes (any N). The cancer has spread to distant parts of the body (M1).

* The following additional categories are not listed on the table above:

- TX: Main tumor cannot be assessed due to lack of information.
- NX: Regional lymph nodes cannot be assessed due to lack of information.

### Stages of subglottic laryngeal cancer

<table>
<thead>
<tr>
<th>AJCC stage</th>
<th>Stage grouping</th>
<th>Stage description*</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Tis N0 M0</td>
<td>The tumor is only in the top layer of cells lining the inside of the larynx and has not grown any deeper (Tis). The cancer has not spread to nearby lymph nodes (N0) or to distant parts of the body (M0).</td>
</tr>
<tr>
<td>I</td>
<td>T1 N0 M0</td>
<td>The tumor has grown deeper, but it is only in the subglottis (T1). The cancer has not spread to nearby lymph nodes (N0) or to distant parts of the body (M0).</td>
</tr>
<tr>
<td>Stage</td>
<td>Tumor Characteristics</td>
<td>Lymph Node Metastasis</td>
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<tr>
<td>II</td>
<td>T2 N0 M0</td>
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<td></td>
<td>The tumor has grown into the vocal cords, which might or might not move normally (T2).</td>
<td>The cancer has not spread to nearby lymph nodes (N0) or to distant parts of the body (M0).</td>
</tr>
<tr>
<td>III</td>
<td>T3 N0 M0</td>
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<tr>
<td></td>
<td>The tumor is still only in the larynx, but it has caused a vocal cord to stop moving, OR the tumor is growing into the paraglottic space, OR the tumor is growing into the inner part of the thyroid cartilage (firm tissue that separates the thyroid gland from the front of the larynx) (T3).</td>
<td>The cancer has not spread to nearby lymph nodes (N0) or to distant parts of the body (M0).</td>
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<td></td>
<td>OR</td>
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<tr>
<td></td>
<td>T1 to T3 N1 M0</td>
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<tr>
<td></td>
<td>The tumor might or might not have grown into structures just outside the larynx, and it might or might not have affected a vocal cord (T1 to T3).</td>
<td>The cancer has spread to a single lymph node on the same side of the neck as the tumor, which is no larger than 3 centimeters (cm) across (N1). The cancer has not spread to distant parts of the body (M0).</td>
</tr>
<tr>
<td>IVA</td>
<td>T4a N0 or N1 M0</td>
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<tr>
<td></td>
<td>The tumor is growing through the cricoid or thyroid cartilage and/or is growing into structures beyond the larynx (such as the thyroid gland, trachea, esophagus, tongue muscles, or neck muscles). This is also known as moderately advanced local disease (T4a).</td>
<td>The cancer has not spread to nearby lymph nodes (N0), or it has spread to a single lymph node on the same side of the neck as the tumor, which is no larger than 3 centimeters (cm) across (N1). The cancer has not spread to distant parts of the body (M0).</td>
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<td>OR</td>
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<td></td>
<td>T1-T4a N2 M0</td>
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<tr>
<td></td>
<td>The tumor might or might not have grown into structures outside the larynx (as far as moderately advanced disease), and it might or might not have affected a vocal cord (T1 to T4a). The cancer is N2:</td>
<td></td>
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</tbody>
</table>
It has spread to a single lymph node on the same side of the neck as the tumor, which is larger than 3 centimeters (cm) but no larger than 6 cm across, OR  
It has spread to more than one lymph node on the same side of the neck as the tumor, none of which is larger than 6 cm across, OR  
It has spread to at least one lymph node on the other side of the neck, none of which is larger than 6 cm across.

The cancer has not spread to distant parts of the body (M0).

<table>
<thead>
<tr>
<th>Stage</th>
<th>T Category</th>
<th>N Category</th>
<th>M Category</th>
<th>Description</th>
</tr>
</thead>
</table>
| IVB   | T4b Any    | Any N     | M0         | The tumor is growing into the area in front of the spine in the neck (the prevertebral space), surrounds a carotid artery, or is growing down into the space between the lungs. This is also known as **very advanced local disease** (T4b).  
The cancer might or might not have spread to nearby lymph nodes (any N). It has not spread to distant parts of the body (M0). |
|      | Any T     | N3         | M0         | The tumor might or might not have grown into structures outside the larynx, and it might or might not have affected a vocal cord (any T).  
The cancer has spread to at least one lymph node that is larger than 6 cm across, OR it has spread to a lymph node and then grown outside of the lymph node (N3). It has not spread to distant parts of the body (M0). |
| IVC   | Any T     | Any N    | M1         | The tumor might or might not have grown into structures outside the larynx, and it might or might not have affected a vocal cord (any T).  
The cancer might or might not have spread to nearby lymph nodes (any N). The cancer has spread to distant parts of the body (M1). |

* The following additional categories are not listed on the table above:
  * TX: Main tumor cannot be assessed due to lack of information.
• NX: Regional lymph nodes cannot be assessed due to lack of information.

Hyperlinks


Last Medical Review: December 20, 2017 Last Revised: December 20, 2017

Hypopharyngeal Cancer Stages

After someone is diagnosed with hypopharyngeal cancer, doctors will try to figure out if it has spread, and if so, how far. This process is called staging. The stage of a cancer describes how much cancer is in the body. It helps determine how serious the cancer is and how best to treat it. Doctors also use a cancer’s stage when talking about survival statistics.

The earliest stage of hypopharyngeal cancer is stage 0, also known as carcinoma in situ (CIS). The other main stages range from I (1) through IV (4). Some stages also use capital letters (A, B, etc.). As a rule, the lower the number, the less the cancer has spread. A higher number, such as stage IV, means cancer has spread more. Although each person’s cancer experience is unique, cancers with similar stages tend to have a similar outlook and are often treated in much the same way.

How is the stage determined?

The staging system most often used for hypopharyngeal cancer is the American Joint Committee on Cancer (AJCC) TNM system, which is based on 3 key pieces of
information:

- The size extent of the main tumor (T): How big is the tumor? How far has it grown into the hypopharynx and nearby structures?
- The spread to nearby lymph nodes (N): Has the cancer spread to nearby lymph nodes in the neck? If so, how many are affected, and how large are they?
- The spread (metastasis) to distant sites (M): Has the cancer spread to distant parts of the body? (The most common sites of spread are the lungs, liver, or bones.)

Numbers or letters after T, N, and M provide more details about each of these factors. Higher numbers mean the cancer is more advanced.

Once the T, N, and M categories of the cancer have been determined, this information is combined in a process called stage grouping to assign an overall stage. For more information, see Cancer Staging\(^2\).

The system described below is the most recent AJCC system, effective January 2018.

Hypopharyngeal cancer typically is given a clinical stage based on the results of any exams, biopsies, and imaging tests that might have been done (as described in How Are Laryngeal and Hypopharyngeal Cancers Diagnosed?\(^3\)). If surgery has been done, the pathologic stage (also called the surgical stage) can be determined.

Hypopharyngeal cancer staging can be complex, so ask your doctor to explain it to you in a way you understand.

### Stages of hypopharyngeal cancer

<table>
<thead>
<tr>
<th>AJCC Stage</th>
<th>Stage grouping</th>
<th>Stage description*</th>
</tr>
</thead>
</table>
| 0          | Tis N0 M0      | The tumor is only in the top layer of cells lining the inside of the hypopharynx and has not grown any deeper (Tis).  
The cancer has not spread to nearby lymph nodes (N0) or to distant parts of the body (M0). |
<p>| I          | T1 N0 M0       | The tumor has grown deeper, but it is only in one part of the hypopharynx, and it is no more than 2 centimeters (cm) across (T1). |</p>
<table>
<thead>
<tr>
<th>Stage</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>II T2 N0 M0</td>
<td>The tumor has grown into more than one part of the hypopharynx, OR it has grown into a nearby area, OR it is larger than 2 but no larger than 4 cm across and has not affected the vocal cords (T2). The cancer has not spread to nearby lymph nodes (N0) or to distant parts of the body (M0).</td>
</tr>
<tr>
<td>III T3 N0 M0</td>
<td>The tumor is larger than 4 cm across, OR the tumor is affecting the movement of the vocal cords, OR the tumor has grown into the esophagus (T3). The cancer has not spread to nearby lymph nodes (N0) or to distant parts of the body (M0).</td>
</tr>
<tr>
<td>OR T1 to T3 N1 M0</td>
<td>The tumor can be any size and might or might not have grown into structures outside the hypopharynx, and it might or might not have affected a vocal cord (T1 to T3). The cancer has spread to a single lymph node on the same side of the neck as the tumor, which is no larger than 3 centimeters (cm) across (N1). The cancer has not spread to distant parts of the body (M0).</td>
</tr>
<tr>
<td>IV A T4a N0 or N1 M0</td>
<td>The tumor has grown into the thyroid or cricoid cartilage, the hyoid bone, the thyroid gland, or nearby areas of muscle or fat. This is also known as moderately advanced local disease (T4a). The cancer has not spread to nearby lymph nodes (N0), or it has spread to a single lymph node on the same side of the neck as the tumor, which is no larger than 3 centimeters (cm) across (N1). The cancer has not spread to distant parts of the body (M0).</td>
</tr>
</tbody>
</table>
| OR T1-T4a N2 M0 | The tumor can be any size and might or might not have grown into structures outside the hypopharynx (as far as moderately advanced disease), and it might or might not have affected a
vocal cord (T1 to T4a). The cancer is N2:

- It has spread to a single lymph node on the same side of the neck as the tumor, which is larger than 3 centimeters (cm) but no larger than 6 cm across, OR
- It has spread to more than one lymph node on the same side of the neck as the tumor, none of which is larger than 6 cm across, OR
- It has spread to at least one lymph node on the other side of the neck, none of which is larger than 6 cm across.

The cancer has not spread to distant parts of the body (M0).

<table>
<thead>
<tr>
<th>IVB</th>
<th>Any T N3 M0</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The tumor can be any size and might or might not have grown into structures outside the hypopharynx, and it might or might not have affected a vocal cord (any T).</td>
</tr>
<tr>
<td></td>
<td>The cancer has spread to at least one lymph node that is larger than 6 cm across, OR it has spread to a lymph node and then grown outside of the lymph node (N3). It has not spread to distant parts of the body (M0).</td>
</tr>
</tbody>
</table>

*The following additional categories are not listed on the table above:
• TX: Main tumor cannot be assessed due to lack of information.
• NX: Regional lymph nodes cannot be assessed due to lack of information.

Hyperlinks


References


Survival Rates for Laryngeal and Hypopharyngeal Cancers

Survival rates can give you an idea of what percentage of people with the same type and stage of cancer are still alive a certain amount of time (usually 5 years) after they were diagnosed. They can’t tell you how long you will live, but they may help give you a better understanding of how likely it is that your treatment will be successful.

Keep in mind that survival rates are estimates and are often based on previous outcomes of large numbers of people who had a specific cancer, but they can’t predict what will happen in any particular person’s case. These statistics can be confusing and may lead you to have more questions. Talk with your doctor about how these numbers may apply to you, as he or she is familiar with your situation.
What is a 5-year relative survival rate?

A relative survival rate compares people with the same type and stage of cancer to people in the overall population. For example, if the 5-year relative survival rate for a specific stage of laryngeal or hypopharyngeal cancer is 80%, it means that people who have that cancer are, on average, about 80% as likely as people who don’t have that cancer to live for at least 5 years after being diagnosed.

Where do these numbers come from?

The American Cancer Society relies on information from the SEER* database, maintained by the National Cancer Institute (NCI), to provide survival statistics for different types of cancer.

The SEER database tracks 5-year relative survival rates for laryngeal and hypopharyngeal cancer in the United States, based on how far the cancer has spread. The SEER database, however, does not group cancers using AJCC TNM stages (stage 1, stage 2, stage 3, etc.) for laryngeal or hypopharyngeal cancer. Instead, it groups cancers into localized, regional, and distant stages:

- **Localized**: There is no sign that the cancer has spread outside of the larynx (or hypopharynx).
- **Regional**: The cancer has spread outside the larynx (or hypopharynx) to nearby structures or lymph nodes.
- **Distant**: The cancer has spread to distant parts of the body, such as the lungs.

### 5-year relative survival rates for laryngeal and hypopharyngeal cancers

These numbers are based on people diagnosed with cancers of the larynx or hypopharynx between 2008 and 2014. For laryngeal cancers, survival rates differ based on which part of the larynx the cancer started in (supraglottis, glottis, or subglottis).

**Supraglottis (part of the larynx above the vocal cords)**

<table>
<thead>
<tr>
<th>SEER stage</th>
<th>5-year relative survival rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Localized</td>
<td>60%</td>
</tr>
<tr>
<td>Regional</td>
<td>47%</td>
</tr>
<tr>
<td>Distant</td>
<td>30%</td>
</tr>
<tr>
<td>All SEER stages combined</td>
<td>46%</td>
</tr>
<tr>
<td>--------------------------</td>
<td>-----</td>
</tr>
</tbody>
</table>

**Glottis (part of the larynx including the vocal cords)**

<table>
<thead>
<tr>
<th>SEER stage</th>
<th>5-year relative survival rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Localized</td>
<td>83%</td>
</tr>
<tr>
<td>Regional</td>
<td>50%</td>
</tr>
<tr>
<td>Distant</td>
<td>42%</td>
</tr>
<tr>
<td>All SEER stages combined</td>
<td>77%</td>
</tr>
</tbody>
</table>

**Subglottis (part of the larynx below the vocal cords)**

<table>
<thead>
<tr>
<th>SEER stage</th>
<th>5-year relative survival rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Localized</td>
<td>61%</td>
</tr>
<tr>
<td>Regional</td>
<td>(not available)</td>
</tr>
<tr>
<td>Distant</td>
<td>47%</td>
</tr>
<tr>
<td>All SEER stages combined</td>
<td>53%</td>
</tr>
</tbody>
</table>

**Hypopharynx**

<table>
<thead>
<tr>
<th>SEER stage</th>
<th>5-year relative survival rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Localized</td>
<td>52%</td>
</tr>
<tr>
<td>Regional</td>
<td>33%</td>
</tr>
<tr>
<td>Distant</td>
<td>19%</td>
</tr>
<tr>
<td>All SEER stages combined</td>
<td>31%</td>
</tr>
</tbody>
</table>

**Understanding the numbers**
• **These numbers apply only to the stage of the cancer when it is first diagnosed.** They do not apply later on if the cancer grows, spreads, or comes back after treatment.

• **These numbers don’t take everything into account.** Survival rates are grouped based on how far the cancer has spread. But other factors, such as your age and overall health, and how well the cancer responds to treatment, can also affect your outlook.

• **People now being diagnosed with laryngeal or hypopharyngeal cancer may have a better outlook than these numbers show.** Treatments improve over time, and these numbers are based on people who were diagnosed and treated at least five years earlier.

*SEER = Surveillance, Epidemiology, and End Results

**Hyperlinks**


**References**


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**Questions to Ask Your Doctor About**
Laryngeal or Hypopharyngeal Cancer

It is important to have frank, open discussions with your cancer care team. They want to answer all of your questions, no matter how minor they might seem. For instance, consider these questions:

- Where is my cancer located?
- Has my cancer spread beyond where it started?
- What is the stage\(^1\) of my cancer, and what does that mean?
- Do I need other tests\(^2\) before we can decide on treatment?
- Are there other doctors I need to see?
- How much experience do you have treating this type of cancer?
- What treatment choices\(^3\) do I have?
- Are you aware of any clinical trials\(^4\) I might be eligible for?
- What do you recommend and why?
- What is the goal of the treatment?
- What are the chances my cancer can be cured with treatment?
- How quickly do we need to decide on treatment?
- What should I do to be ready for treatment?
- How long will treatment last? What will it involve? Where will it be done?
- What risks or side effects that I should expect? How long are they likely to last?
- How will this treatment affect my voice? If my larynx is removed, what are the options for restoring my voice?
- How will treatment affect my daily activities?
- What can we do if the treatment doesn’t work or if the cancer recurs?
- What type of follow-up\(^5\) will I need after treatment?
- Where can I find more information and support?

Along with these sample questions, be sure to write down some of your own. For instance, you might want more information about recovery times so that you can plan your work or activity schedule. Or you may want to ask about getting a second opinion.

References

See all references for Laryngeal and Hypopharyngeal Cancer

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