

# Hypopharyngeal cancer

## Patient information

### *What is cancer?*

The human body is made up of billions of cells. In healthy people, cells grow, divide and die. New cells constantly replace old ones in an orderly way. This process ensures each part of the body has the right number and kinds of cells for good health.

Cancer cells multiply far faster than healthy cells. Also, they do not function like normal cells. They do not serve any useful purpose in the body. In fact, they can sometimes produce toxic substances. Also, they displace normal, healthy cells and compete for the body's resources.

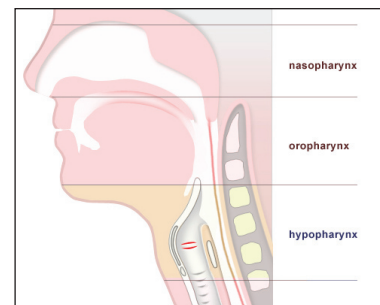
Cells become cancerous when their DNA is damaged. DNA contains the "instructions" cells need to divide and function properly. People can inherit damaged DNA. This is why certain families or groups are at higher risk than others for some cancers. More often, DNA is damaged by exposure to something in the environment, like the toxic chemicals in cigarette smoke.

As the number of cancer cells increases, they often form a mass or lump. This is called a growth or tumor. Eventually, if the cancer cells continue to multiply, they begin to spread through the body. They can invade and damage nearby organs. Also, they can spread to other parts of the body, and start new tumours there. This is called metastasis.

Cancer cells must be killed or removed before they spread (metastasize) through the body. Otherwise, they will damage – and eventually destroy – vital organs.

### *What is the hypopharynx?*

The hypopharynx is the area at the bottom of the throat. It is the entrance into the food pipe.



### *What is hypopharyngeal cancer?*

Hypopharyngeal cancer starts when cells in the hypopharynx become cancerous and start to multiply.

There are many different types of cells in the hypopharynx. Any of these may become cancerous. The type of the cancer is named after the type of cell which is forming the tumour. The most common cancer of the hypopharynx is squamous cell cancer. Squamous cells are flat cells lining the hypopharynx.

### *Risk factors for hypopharyngeal cancer*

Risk factors are things that increase people's chances of developing a disease. Risk factors can be:

- inherited (for example, a damaged gene that makes cancer more likely)
- environmental (for example, living in an area with serious air pollution)
- linked to lifestyle choices (for example, cigarette smoking)

The more risk factors for a certain disease you have, the more likely you are to get that disease.

### ***Risk factors for hypopharyngeal cancer include:***

- Male gender: this cancer is more common in males
- African-American ancestry: people of this ethnic background are at higher risk for this cancer
- Age: over 60 years old
- Tobacco use: smoking or chewing tobacco
- Heavy alcohol consumption, especially combined with tobacco use: people who smoke and drink heavily are 100 times more at risk
- Human Papilloma Virus (HPV)
- Exposures to asbestos, nickel compounds and certain mineral oils
- Family history: having a close relative with head and neck cancer
- Previous treatment with radiotherapy
- Medical history of head or neck cancers
- Plummer-Vinson syndrome: a rare disorder linked to dietary deficiencies

### ***Symptoms of hypopharyngeal cancer***

Hypopharyngeal cancer may produce any combination of the following symptoms:

- A sore throat that does not go away
- Difficult or painful swallowing
- Sensation of having something in the throat
- Acid reflux (heartburn)
- Ear pain
- Lump or mass in neck lump or mass
- Change in the voice
- Weight loss
- Coughing blood

### ***Diagnosing hypopharyngeal cancer***

A firm diagnosis of cancer must be made before treatment starts. Often, this is done using a procedure called

a biopsy. A small piece of tissue is taken from the suspected cancer site and examined under a microscope. This lets doctors be sure that cancer cells are really present.

Doctors may also need to do other tests to see how far the cancer has spread. These might include tests such as CT (computed tomography) or MRI (magnetic resonance imaging) scans and X-rays. These tests allow doctors to take detailed pictures of structures inside the body and see exactly where the cancer is.

If your doctors suspect hypopharyngeal cancer, they will do a full head and neck examination. This will include examining the throat, and feeling for lumps in the mouth and neck. They may also use a special camera to take pictures of the inside of your throat.

### ***Stages of cancer***

Doctors stage or classify cancers according to how large they are, and how far they have spread from their original locations. Staging systems for different cancers can be complex. As a general rule however, the higher the stage number, the larger the cancer is, and the more it has spread. For example, a stage one cancer is relatively small, and has not spread far from its original site. A stage four cancer, on the other hand, is quite large, and has spread far away from its original site.

#### ***The stages of hypopharyngeal cancer are:***

**Stage 1:** The tumour is smaller than 2 cm. It is limited to the hypopharynx.

**Stage 2:** The tumour is between 2 and 4 cm. It has not spread to the voice box or tissues surrounding the hypopharynx.

**Stage 3:** The tumour is larger than 4 cm and/or has spread into the voice box and/or into a single lymph node.

**Stage 4:** The cancer has spread to the nearby tissues, the thyroid, the nearby blood vessels, or the voice box. It may affect multiple lymph nodes and may have spread to other sites in the body.

### ***Treatments for hypopharyngeal cancer: overview***

Most cancers are treated with surgery, radiotherapy (radiation) or chemotherapy – or some combination of these three therapies. Since every patient, and every case is unique, there is no “ideal” course of treatment. Your doctor will prescribe the treatment, or combination of treatments, which is best for you. Your treatment will depend on the stage of your cancer, your level of health and your medical history.

Hypopharyngeal cancer is not always curable. Even so, treatment may decrease the size of the tumor and preventing it from spreading. Sometimes, therapy given solely to relieve symptoms. This is called palliative treatment.

Patients treated in specialized head and neck centers where personnel are more experienced tend to have higher survival rates.

### ***Treatments for hypopharyngeal cancer: surgery***

Often, tumours must be surgically removed. How serious the surgery is, and how much tissue is removed depends on the stage of the cancer, what internal structures are affected and other factors such as your general level of health. Surgery is usually very effective. However, it is often followed by other forms of therapy, to try and ensure all cancer cells have been eliminated.

#### ***The following surgical procedures may be done to treat people with hypopharyngeal cancer:***

**Neck dissection:** if the cancer has spread into the lymph

nodes of the neck, the surgeon may do a neck dissection to remove the lymph nodes. He or she may also remove muscle, soft tissues, blood vessels and nerves from the affected area. This may cause ear numbness, weakness of the lower lip and difficulty in raising your arm.

**Total or partial pharyngectomy:** this type of surgery involves removing part or all of the hypopharynx. The larynx, your voice box, is often removed as well. This means that you will lose your ability to talk normally. Your hypopharynx will be reconstructed in order to improve your ability to swallow after the surgery.

**Tracheotomy:** a tube is put to connect your wind pipe (trachea) to the outside in the front of your neck. It will be performed if your voice box is removed or if your cancer is blocking the windpipe.

**Gastrostomy tube:** after surgery, you may be unable to swallow. This may only last for a few weeks or it may be permanent. It may be necessary to place a feeding tube through the skin directly into your stomach.

### ***Treatments for hypopharyngeal cancer: radiotherapy***

In radiotherapy, doctors use tightly focused beams of radiation to kill cancer cells, while sparing as many healthy cells as possible. Radiotherapy is not at all painful. However, because the beams of radiation also kill healthy cells near the tumour, radiotherapy may cause side effects after treatment.

Radiotherapy is often as an alternative to surgery for small hypopharyngeal tumors, because it does not involve removing the voice box. It can also be used to treat patients in poor health and to kill cancer cells not removed by surgery. Finally, radiation can be used in incurable cancers to relieve pain, difficulty swallowing and bleeding.

*The most common side effect of radiation are:*

- 1) **Skin problems:** skin may appear red, sunburned or feel irritated. This will go away after treatment ends.
- 2) **Fatigue:** many patients will feel extremely tired as a result of treatment.
- 3) **Loss of appetite:** radiotherapy, other cancer treatments or stress can result in loss of appetite. However, it is very important to eat well during cancer treatments.
- 4) **Loss of hair:** radiotherapy sometimes causes hair loss. Ask your doctor if he/she thinks this will happen in your case.

### **Chemotherapy**

In chemotherapy, anticancer drugs are injected or taken by mouth. These drugs are specially designed to seek out and kill cancer cells. However, they can also damage normal cells. This causes side effects such as:

- nausea
- vomiting
- loss of appetite
- hair loss
- sores in the mouth

Anticancer drugs often affect the bone marrow, where blood cells are made. This decreases the number of cells in your blood and can cause side effects such as:

- increased risk of infection
- bruising
- bleeding due to minor cuts
- shortness of breath
- tiredness
- weakness

Most of these side effects will disappear at the end of treatment.

### **Where can I get more information?**

Don't hesitate to ask your doctor or any member of your healthcare team about your disorder or its treatment. It's important that you learn as much as you can about your condition. That way, you will know what to expect, and how you can help yourself stay as healthy as possible. Because your doctor knows the details of your case, he or she is the best person to answer your questions.

If you would like to read more about hypopharyngeal cancer, here are some useful websites with reliable information:

Canadian Cancer Society: [www.cancer.ca](http://www.cancer.ca)

National Cancer Institute: [www.cancer.gov](http://www.cancer.gov)

American Cancer Society: [www.cancer.org](http://www.cancer.org)

The American Head and Neck Society:

[www.headandneckcancer.org](http://www.headandneckcancer.org)

Head and Neck Cancer: [www.hncancer.com](http://www.hncancer.com)

Cancer Care: [www.cancercare.org](http://www.cancercare.org)

Chemotherapy is generally used when the tumor is big or when it has spread too far to be treated with surgery and/or radiotherapy. It can be used in conjunction with radiotherapy to preserve the voice box.

### **A Word from Your Doctor**

#### **Dr. Karen Kost**

*Dear Patient,*

*As a healthcare professional, your well-being is very important to me. It is for this very reason that we are offering you this document to better inform you about the cancer you are battling.*

*If after having read this document you still have questions, please do not hesitate to ask them during your next appointment, or contact me at (514) 934-1934, ext. 48018.*



***Together we will beat cancer!***

#### *Special thanks*

We would like to acknowledge the time and efforts of Dr. Mélanie Duval who volunteered to write this document to better inform our patients.

***Thank you Dr. Mélanie Duval***



**Centre universitaire de santé McGill**  
**McGill University Health Centre**

**IMPORTANT : PLEASE READ**

Information provided in this pamphlet is for educational purposes. It is not intended to replace the advice or instruction of a professional healthcare practitioner, or to substitute medical care. Contact a qualified healthcare practitioner if you have any questions concerning your care.