

Thyroid cancer

Patient information

What is cancer?

The human body is made up of billions of cells. These cells grow, divide and replace old ones with healthy new ones in an orderly manner.

Cancer cells multiply faster than healthy cells and do not function like normal cells. In fact, not only do they lack any useful purpose in the body, but they can also produce toxic substances, displace healthy cells, and compete for the body's limited resources.

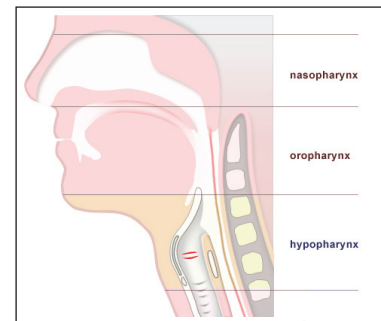
Cells become cancerous when their DNA is damaged. DNA contains the "instructions" needed to divide and function properly. People can inherit damaged DNA. This is why certain families or groups are at higher risk than others for some cancers. Moreover, DNA is damaged by exposure to some insult in the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

As the number of cancer cells increases, they form a mass or lump. This is called a tumour. As the cancer cells continue to multiply, they begin to damage nearby organs and spread throughout the body. The process of tumour spread is termed metastasize.

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

What is the thyroid gland?

The thyroid is a butterfly-shaped gland located in the neck at the front of the trachea (near the area where one places a bow tie). The thyroid gland produces a hormone, which is necessary for your body's health, metabolism, and growth.



What is thyroid cancer?

Thyroid cancer starts when cells in the thyroid multiply and develop the ability to spread throughout the body. The type of cancer is named after the type of cell which forms the tumour. Several different types of cells in the thyroid may become cancerous. There are four main types of thyroid cancer:

- papillary thyroid cancer (PTC)
- follicular thyroid cancer (FTC)
- medullary thyroid cancer (MTC)
- anaplastic thyroid cancer (ATC)

Risk factors for thyroid cancer

Major risk factors for thyroid cancer include:

- Exposure to high-dose radiation
- Family history of thyroid cancer
- Gender: thyroid masses are more likely to be cancerous in males
- Age: risk increases with the extremes of age (young children and over 45)
- Syndromes: certain syndromes are associated with thyroid cancer

Symptoms of thyroid cancer

This form of cancer may produce one or more of the following symptoms:

- Mass on the thyroid gland
- Hoarseness
- Swallowing difficulties

Diagnosing thyroid cancer

Once a patient or health professional detects a thyroid mass through a physical exam, imaging and blood tests become necessary. The most useful imaging modality is ultrasound. Following the ultrasound a biopsy is necessary. This involves sampling a piece of tissue from the suspected cancer site using a small needle.

Doctors may also need to perform other tests to assess whether the cancer has spread. These might include tests such as high resolution CT, MRI (magnetic resonance imaging), and/or PET CT scan.

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 and detailed. 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 from its original site. A stage four cancer, on the other hand, is quite large, and may have spread from its original site.

Treatments for thyroid cancer: overview

Since every patient and every case is unique, 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.

Treatments for thyroid cancer: surgery

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

The most common surgical procedures performed to treat people with thyroid cancer is a total thyroidectomy. Total thyroidectomy is the removal of the entire thyroid gland. If the cancer has spread to nearby lymph nodes the surgery will remove those as well. The risks of surgery are small if performed by an experienced surgeon. They include damage to the recurrent laryngeal nerves (which leads to an impairment in the ability to speak), and damage to the parathyroid glands (which regulate calcium levels in the blood).

Treatments for thyroid cancer: radioactive iodine

After surgery radioactive iodine is often given to address any potential remaining microscopic tumour cells.

Where can I get more information?

Do not hesitate to ask your doctor or any member of your healthcare team about your disorder or its treatment. It is 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. Since 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 thyroid cancer, here are some useful websites with reliable information:

Canadian Society of Otolaryngology:
www.entcanada.org

American Academy of Otolaryngology:
www.entlink.net

Canadian Cancer Society: **www.cancer.ca**

National Cancer Institute: **www.cancer.gov**

American Cancer Society: **www.cancer.org**

The American Head and Neck Society:
www.headandneckcancer.org

Cancer Care: **www.cancercare.org**

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. Lawrence Koby who volunteered to write this document to better inform our patients.

Thank you Dr. Lawrence Koby



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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.