

What is thyroid cancer?

Thyroid cancer occurs when abnormal cells within the thyroid gland grow in an uncontrolled way.

The thyroid is a gland located at the base of the throat near the windpipe. It produces hormones that help control the body's heart rate, temperature and metabolism and the amount of calcium in the blood.

What are the different types of thyroid cancer?

There are four main types of thyroid cancer. These are named after the cell type in which the cancer first develops.

- ▶ papillary thyroid cancer is the most common type of thyroid cancer¹
- ▶ follicular thyroid cancer¹
- ▶ medullary thyroid cancer¹
- ▶ anaplastic thyroid cancer (rare).¹

What are the symptoms of thyroid cancer?

The most common symptoms of thyroid cancer are:

- ▶ a lump or swelling in the throat^{1,2}
- ▶ difficulty breathing or shortness of breath^{1,2}
- ▶ difficulty swallowing – this is called dysphagia^{1,2}
- ▶ a hoarse voice or a cough that doesn't go away^{1,2}
- ▶ enlarged lymph nodes in the neck.²

There are a number of conditions that may cause these symptoms, not just thyroid cancer. If any of these symptoms are experienced, it is important that they are discussed with a doctor.

What are the risk factors for thyroid cancer?

A risk factor is any factor that is associated with an increased chance of developing a particular health condition, such as thyroid cancer. There are different types of risk factors, some of which can be modified and some which cannot.

It should be noted that having one or more risk factors does not mean a person will develop thyroid cancer. Many people have at least one risk factor but will never develop thyroid cancer, while others with thyroid cancer may have had no known risk factors. Even if a person with thyroid cancer has a risk factor, it is usually hard to know how much that risk factor contributed to the development of their disease.

While the causes of thyroid cancer are not fully understood, there are a number of factors associated with the risk of developing the disease. These factors include:

- ▶ exposure to radiation¹
- ▶ a family history of thyroid disease or thyroid cancer¹
- ▶ certain genetic conditions, such as familial medullary thyroid cancer, multiple endocrine neoplasia type 2A syndrome, and multiple endocrine neoplasia type 2B syndrome.¹

How is thyroid cancer diagnosed?

A number of tests may be performed to investigate symptoms of thyroid cancer and confirm a diagnosis. Some of the more common tests include:⁴

- ▶ a physical examination¹
- ▶ examination of a blood sample^{1,2}
- ▶ imaging of the thyroid, which may include ultrasound, computed tomography (CT) scan or magnetic resonance imaging (MRI)²
- ▶ internal examination of the voicebox using a laryngoscope – a thin tube with a light on the end of it
- ▶ taking a sample of tissue (biopsy) from the thyroid gland for examination under a microscope.

Treatment options

Treatment and care of people with cancer is usually provided by a team of health professionals – called a multidisciplinary team.

Treatment for thyroid cancer depends on the stage of the disease, the severity of symptoms and the person's general health. Treatment options can include surgery to remove part or all of the thyroid gland, and radiotherapy (including radioactive iodine therapy), chemotherapy, and/or targeted therapies to destroy cancer cells.^{1,2}

Research is ongoing to find new ways to diagnose and treat different types of cancer. Some people may be offered the option of participation in a clinical trial to test new ways of treating thyroid cancer.

Finding support

People often feel overwhelmed, scared, anxious and upset after a diagnosis of cancer. These are all normal feelings.

Having practical and emotional support during and after diagnosis and treatment for cancer is very important. Support may be available from family and friends, health professionals or special support services.

In addition, State and Territory Cancer Councils provide general information about cancer as well as information on local resources and relevant support groups. The Cancer Council Helpline can be accessed from anywhere in Australia by calling **13 11 20** for the cost of a local call.

More information about finding support can be found on the Cancer Australia website **www.canceraustralia.gov.au**

References

1. National Cancer Institute. Thyroid cancer treatment (PDQ) – patient version. Available from <http://www.cancer.gov/cancertopics/pdq/treatment/thyroid/Patient>. [Accessed July 2012].
2. Brennan M, French J. Thyroid lumps and bumps. *Australian Family Physician* 2007; 36(7): 531–536.