Thyroid Cancer

Thyroid cancer forms in the thyroid gland, an organ at the base of the throat that makes hormones affecting heart rate, blood pressure, body temperature, and weight. It also plays a small role in regulating the body's calcium. Papillary and follicular carcinomas are the two most common types of thyroid cancer. Additional types include medullary thyroid carcinoma and anaplastic carcinoma, and very rare forms are thyroid lymphoma and thyroid sarcoma.

Main Types

- **Papillary thyroid cancer:** About 80 percent of all thyroid cancers are diagnosed as papillary carcinoma. This type typically grows slowly, is highly treatable, and is seldom fatal, although it sometimes spreads to the lymph nodes.
- Follicular thyroid cancer: About 10 percent of thyroid cancers are diagnosed as follicular carcinoma, which is a subtype of papillary thyroid cancer. It is most common in people without enough iodine in their diet. It doesn't usually spread to the lymph nodes, but can spread to other parts of the body.
- **Medullary thyroid cancer (MTC)**: About 4 percent of all thyroid cancers are diagnosed as MTC. It can spread to other body parts before a thyroid nodule is detected. Because it does not take in radioactive iodine, treatment for MTC is more difficult and the prognosis not as favorable.
- Anaplastic thyroid cancer: About 2 percent of all thyroid cancers are diagnosed as anaplastic thyroid cancer. This type is believed to occasionally develop from a papillary or follicular cancer. It can grow and spread quickly and is difficult to treat.

Statistics

- In 2016, 62,450 new cases of thyroid cancer are expected to be diagnosed in the United States.
- An estimated 1,980 Americans will die from the disease in 2016.
- In Texas, an estimated 3,720 new thyroid cancer cases will be diagnosed, and 138 deaths are expected in 2016.
- Although the risk of developing most other adult cancers increases with age, approximately 70 percent of newly diagnosed thyroid cancer patients are under 60 years of age.
- The incidence rate of thyroid cancer has tripled over the last 30 years to become the most rapidly increasing cancer type in the U.S.

Risk Factors

- Age: Risk of developing thyroid cancer peaks in women during their 40s and 50s while men are usually diagnosed in their 60s and 70s.
- Gender: Women are three times more likely to develop thyroid cancer than men.
- **Radiation:** Exposure to high levels of radiation increases risk.
- Low Iodine: People who do not get enough iodine in their diet have a higher risk.
- **Family history:** Those with a family history of thyroid disease or thyroid cancer; familial medullary thyroid cancer (FMTC); colon growths or familial adenomatous polyposis (FAP); familial nonmedullary thyroid carcinoma; Cowden disease; Carney complex, type I; or multiple endocrine neoplasia type 2A or 2B syndrome have a higher risk.
- Personal history: Individuals with an enlarged thyroid, a condition called goiter, have a higher risk.

Symptoms and Signs

- Enlargement of the neck
- Difficulty swallowing or breathing
- Persistent cough

- Hoarseness or voice changes
- Persistent pain in the front of the neck or throat
- Noticeable lump in the neck

Tips for Prevention

Doctors aren't sure what causes most cases of thyroid cancer, so there's no prevention. Those with an inherited gene mutation for familial medullary thyroid cancer (MTC) may choose to have the thyroid gland removed to prevent a future thyroid cancer. Genetic counseling and testing for the gene is available.

Treatment Options

Several factors determine the best course of treatment including the type and stage of the cancer and the patient's overall health. Thyroid cancer may be treated with surgery, thyroid hormone treatment, radioactive iodine therapy, radiation, chemotherapy, or targeted therapy. Most patients receive a combination of treatments.

Source: American Cancer Society, National Cancer Institute, and Texas Cancer Registry

