Understanding Thyroid Cancer

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Types of Thyroid Cancer

Thyroid cancer will affect an estimated 52,000 adults in the year 2019, 14,260 men and 37,810 women. It is the sixth most common cancer in women and the most common cancer in women ages 20 to 34.

Until recently, thyroid cancer was the fastest growing cancer in the United States. Researchers believe that these cancers may have always been present, but we now have improved diagnostics. Fortunately, this increase is beginning to taper off.

What Is Thyroid Cancer?

Thyroid cancer develops in the thyroid gland, a butterfly-shaped gland at the base of the neck.

The thyroid gland has many responsibilities; it secretes hormones that assist with many bodily functions, such as metabolism, regulation of heart rate, blood pressure, body temperature and weight.

There are various types of thyroid cancer:

- Papillary thyroid cancer is the most common type, accounting for 70% to 80% of all thyroid cancers. It is a slow growing cancer and spreads to the lymph nodes in the neck, but has an excellent prognosis even if it has spread.
- Follicular thyroid cancer accounts for 10% to 15% of all thyroid cancers. This type of thyroid cancer is more likely to spread to other organs, such as the lungs and the bones.
- Medullary thyroid cancer accounts for about 2% of all thyroid cancers. Of those, 25% note a genetic predisposition and it may coincide with other endocrine tumors. It is linked to a gene mutation and if caught early, surgery is typically curative.
- Anaplastic thyroid cancer is rare, accounting for less than 2% of all thyroid cancers. This type of thyroid cancer is the most aggressive and the least likely to respond to treatment.

Causes

As with many other health conditions, there is no clear-cut cause for thyroid cancer.

However, there are known risk factors:

- It is most common in those who have been exposed to high doses of radiation.
- Medullary thyroid cancer has a familial tendency.
- It is most common over the age of 40.

Those who have been exposed to nuclear disasters have a much higher risk of developing thyroid cancer. The

1986 explosion at the Chernobyl power plant in Russia, as well as the 2011 nuclear disaster in Fukushima, Japan are examples.

Symptoms

Most types of thyroid cancer are asymptomatic. However, the most common symptom is a lump felt in the neck. Other symptoms that may occur, which are rare, include:

- Hoarseness
- Change in the voice
- Pain, though this mostly only occurs with medullary thyroid cancer
- Difficulty swallowing if the lump is compressing the esophagus

Neck pain in the thyroid region may indicate a thyroid nodule. A thyroid nodule is a tiny lump on the thyroid gland that is very common. In fact, 75% of the adult population has thyroid nodules, with approximately 90% of those over the age of 80 having at least one thyroid nodule.

Treatment of Thyroid Cancer

Those who have been exposed to nuclear energy, or are even living within 10 minutes of a nuclear power plant, may be recommended to take potassium iodide. These supplements block the effects of radiation to the thyroid.

Adults and children who are known to carry the gene mutation that causes medullary thyroid cancer may be recommended to have a prophylactic thyroidectomy, or a preventative removal of the thyroid gland.

If thyroid cancer has been diagnosed, the primary treatment is surgery, regardless of the type of thyroid cancer. The type of surgery will depend on the extent of the cancer, but may involve only removing a portion of the gland (lobectomyor) or the entire gland (thyroidectomy). Here are som key points regarding thyroid surgery:

- Lymph nodes in the area of the thyroid gland can be removed at the same time, especially if lymph node involvement is suspected.
- Thyroid cancer is often cured by the removal of the thyroid.
- Replacement of the thyroid hormone is almost always required; this will be a lifelong treatment.

Radioactive iodine therapy may also be utilized. This therapy is typically performed after a thyroid surgery and eliminates all normal thyroid tissue. This reduces the possibility of the cancer spreading to the normal tissue.

chemotherapy and external beam radiation are typically only used when thyroid cancer has become advanced. Unfortunately, when thyroid cancer has become advanced, these treatments typically do not cure the cancer, but they may slow the spread of the cancer.

Early detection is key, but this can be difficult, as most types of thyroid cancer are asymptomatic. This is why it is important to see and talk to your doctor if you are experiencing any associated symptoms, or if any of the thyroid cancer risk factors apply to you.