

# **THYROID NODULES**



The thyroid is a small butterfly shaped gland located at the base of the neck. The thyroid gland secretes thyroid hormone that regulates the body's metabolism, i.e. heart rate, body temperature, energy usage, etc.

Thyroid nodules are lumps in the thyroid gland. They may be found by chance during a routine physical or from a scan of the neck due to other medical issues. Thyroid nodules are very common among persons over age 50 and women are 3 times more likely than men to develop them. However, the majority of thyroid nodules are benign (non-cancerous) growths.

The cause of most thyroid nodule is not known. A lack of iodine in the diet, and an autoimmune disorder known as Hashimoto's thyroiditis that causes an underactive thyroid, may increase the risk of developing thyroid nodules. Iodine is found in foods such as seaweed, seafood, and dairy products, as well as in iodized salt. Thus, iodine deficiency is rare in the U.S.

#### Symptoms of thyroid nodules

Most of the time, thyroid nodules do not show any symptoms. They seldom cause pain or discomfort. The most common symptom is a lump in the throat or neck. If the nodule is large enough, there may be difficulty swallowing or breathing.

### Diagnostic tests for thyroid nodules

These tests help to determine whether the thyroid nodule is benign (non-cancerous) or malignant (cancerous):

- Blood test to find out how much thyroid hormone is being produced
- Ultrasound of the thyroid and lymph nodes of the neck
- Fine needle aspiration biopsy

## **Treatment of thyroid nodules**

- For benign thyroid nodules, observation or watchful waiting is the usual treatment plan. Thyroid blood tests, ultrasound and physical exam may be done yearly to see if the nodule has increased in size.
  Nodules that make too much thyroid hormones may be treated with radioactive iodine, an oral medicine to shrink the thyroid nodules, or anti-thyroid medications to stop the production of thyroid hormones. If the thyroid nodule becomes too large or causes symptoms, surgery will need to be considered.
- For malignant thyroid nodules, surgery to remove the entire or part of the thyroid gland is the course of treatment.

#### Reference:

https://www.thyroid.org/thyroid-nodules/