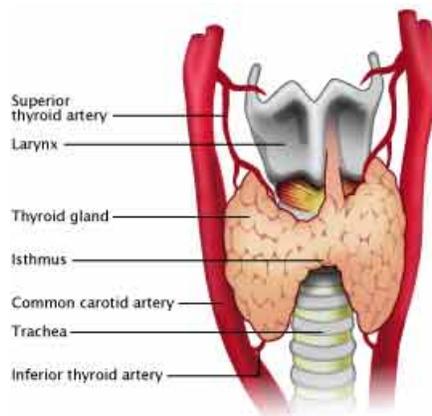


## Thyroid Basics

AAEDA provides expert care for those suffering from thyroid conditions. Some basic subjects such as what exactly does the thyroid gland do, what is hypo- or hyperthyroidism, what thyroid treatment products do, and the effects you'll experience over time are covered here for your information.

### What exactly does the thyroid gland do?

The thyroid is located at the base of the throat, it has a right and left lobe which are connected by a small bridge of tissue called isthmus. The thyroid gland is stimulated by the pituitary gland to produce hormones like thyroxine (T4 or thyroid hormone). Thyroxine determines how quickly nutrients are converted into energy and how efficiently food is burned within the body.



### What is hypothyroidism?

Hypothyroidism is a condition that occurs when the thyroid gland does not produce sufficient amounts of thyroid hormones, specifically thyroxine. There are several symptoms which can indicate a thyroid condition. The most common indicators of an under active thyroid are unexplained weight gain, fatigue, moodiness, constipation, sensitivity to cold temperatures, fragile hair and nails, and possibly even clumsiness; there are others, and each individual exhibits a unique set of symptoms.

### Thyroid Nodules

Simply put, thyroid nodules are lumps which commonly arise within an otherwise normal thyroid gland. Often these abnormal growths of thyroid tissue are located at the edge of the thyroid gland so they can be felt as a lump in the throat. When they are large or when they occur in very thin individuals, they can even sometimes be seen as a lump in the front of the neck. As a rule:

One in 12 to 15 young women has a thyroid nodule

One in 40 young men has a thyroid nodule

More than 95 percent of all thyroid nodules are benign (non-cancerous growths)

Some are actually cysts which are filled with fluid rather than thyroid tissue

Most people will develop a thyroid nodule by the time they are 50 years old

The incidence of thyroid nodules increases with age

When a nodule is discovered, AAEDA physicians work to determine if the nodule is cancerous, causing trouble with other structures in the neck, or is the nodule making too much thyroid hormone. After an appropriate work-up, most thyroid nodules will yield an answer of **NO** to all of the above questions. In this most common situation, there is a small to moderate sized nodule which is simply an overgrowth of "normal" thyroid tissue, or even a sign that there is too little hormone being produced. Patients with a diffusely enlarged thyroid (called a **goiter**) will present with what is perceived at first to be a nodule, but later found to be only one of many benign enlarged growths within the thyroid (a goiter). Usually a **fine needle aspiration biopsy (FNA)** will tell if the nodule is cancerous or benign. This one test can get right to the bottom of the issue (covered in detail on another page). Often an **Ultrasound** examination is necessary to determine the characteristics of a thyroid nodule (ultrasound is covered in detail on another page)

## **Symptoms of Thyroid Nodules**

Most thyroid nodules cause no symptoms at all. They are usually found by patients who feel a lump in their throat or see it in the mirror. Occasionally, a family member or friend will notice a strange lump in the neck of someone with a thyroid nodule. Another common way in which thyroid nodules are found is during a routine examination by a physician.

Occasionally, nodules may cause pain, and even rarer still are those patients who complain of difficulty swallowing when a nodule is large enough and positioned in such a way that it impedes the normal passage of food through the esophagus (which lies behind the trachea and thyroid).

Patients are encouraged to remember that the vast majority of thyroid nodules are benign. AAEDA physicians treat these problems on a regular basis, and your specific care will be vigilantly charted and taken care of by our expert staff.