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## **ULTRASONOGRAPHIC DIAGNOSIS OF THYROID NODULES**

**Abstract:** The term “thyroid nodule” refers to any abnormal growth that forms a lump in the thyroid gland.

The thyroid gland is located low in the front of the neck. The gland consists of right and left lobe connected by a narrow bridge of tissue anterior to the trachea called the isthmus. The common carotid artery and the internal jugular vein are important landmarks that lie posterior and lateral to the thyroid and define its lateral margins.

A thyroid nodule can occur in any part of the gland. Some nodules can be felt quite easily, while others can be hidden deep in the thyroid tissue or located very low in the gland where they are difficult to feel.

The vast majority of thyroid nodules do not cause symptoms.

Thyroid nodules may be single or multiple.

Although the majority of thyroid nodules are benign, some of them contain cancer. Therefore, the primary purpose for evaluating a thyroid nodule is to determine whether cancer is present.

Ultrasound is the initial imaging study performed in patients with suspected thyroid disease.

Ultrasound examination is a relatively inexpensive, rapid, and non invasive technique for the evaluation of a thyroid nodule.

It is extremely sensitive and will identify abnormalities in many thyroid glands in which there is no palpable abnormality on clinical examination.

The major role of ultrasound is to determine if the nodule is solid or cystic and to evaluate the remainder of the thyroid gland.

The accuracy and reproducibility of ultrasonographic measurement is a useful aid in evaluate the progression or regression of the nodule.

**Key words:** thyroid nodule, ultrasonography, cancer.