What is a Thyroid Nodule?

A thyroid nodule is a lump in the thyroid gland as a result of growth of thyroid tissue or a fluid-filled cyst. Nodules are very common and increase with age. A nodule usually does not cause complaints; however, if it is large, there may be pain, hoarseness, difficulties in swallowing or breathing.

Most thyroid nodules are benign (non-cancerous), with only 7% having cancer.

Endocrine Connection

Although thyroid nodules are a structural problem, they usually do not affect the functioning of the gland; therefore, most patients have normal hormone levels. There are different types of thyroid nodules:

Thyroid cysts: They only contain fluid and are usually benign; and typically do not affect thyroid function. When they cause discomfort, they can be drained with a needle, or surgically removed.

Solid thyroid nodules: Most thyroid nodules are solid (solid, fluid-free), and most are cancerfree. These typically do not affect thyroid function and are evaluated with ultrasound.

Overactive 'toxic' thyroid nodules: Only a small percentage of thyroid nodules produce high levels of thyroid hormone and these are called 'toxic adenomas'. Toxic adenomas are usually benign, and the options for treating them are similar to other causes of hyperthyroidism.

The cause of most benign nodules is unknown, but they are usually found in members of the same family. Worldwide, dietary iodine deficiency is a very common cause of nodules. Thyroid nodules become more common with increased age.