How is a thyroid nodule diagnosed? What does lab test mean?

Most thyroid nodules are discovered incidentally on a routine physical examination or X-ray study of the neck. If a nodule is present, a blood test is done to find out if the thyroid is functioning normally. In most cases thyroid functions are normal, but occasionally hyperthyroidism (producing too much thyroid hormone) or hypothyroidism (not producing enough thyroid hormone) can also be found.

However, blood tests do not detect whether you have thyroid cancer. To gather more information about the nodule, your doctor will do one or more of the following tests:

Thyroid Ultrasound: This is used to get a complete picture of the thyroid and see if the nodule is solid or filled with fluid (cystic). Thyroid nodules are evaluated according to their size, location within the thyroid, and other features of the nodule that may increase or decrease the likelihood of carrying cancer. With all these factors in mind, your doctor may recommend that you to perform a biopsy, continuous monitoring with ultrasound, other types of imaging.

Fine-Needle Aspiration Biopsy: It is performed to extract cells or fluid samples from the nodule with a fine needle and determine whether it contains cancer. Usually, thyroid ultrasound is used as a guide. It is a very useful office procedure for identifying cancerous or "suspicious" nodules and is well tolerated by most patients.

Thyroid Scintigraphy: Scintigraphy performed with a low amount of radioactive material and a special camera is usually; usually when thyroid hormone levels are elevated.