

Follicular Thyroid Carcinoma

There are four main types of thyroid cancer, listed in descending order of prevalence are papillary, follicular, medullary, and anaplastic. Follicular thyroid carcinoma, the second most common type, commonly presents as a solitary thyroid nodule with good prognosis. It is characterized by hematogenous spread, thyroid capsule invasion, and histological findings like uniform follicles. A major risk factor for follicular carcinoma is a history of head and neck radiation, and women are more commonly affected than men.



PLAY PICMONIC

Characteristics

Most Common to Present as Solitary Cold Nodule

#1 Foarm-finger with Cold Knob

Thyroid scintigraphy involves the use of radioisotopes of iodine that are administered to a patient, taken up by normal thyroid follicular cells, and concentrated to produce what is known as a hot nodule when viewed on imaging. Follicular carcinoma cells exhibit poor uptake of the radioisotopes, and thus appear as a cold nodule.

Hematogenous Spread

Blood Spreading

Despite the trend of most carcinomas spreading lymphatically, follicular carcinomas are unique in that they exhibit hematogenous spread. They will metastasize to areas of high blood flow, such as the lungs, liver, and bones.

Good Prognosis

Doctor with Good Prognosis

Follicular carcinomas like papillary carcinomas are susceptible to both radiation and surgical treatment, and the 10-year survival rate is over 85%.

Histological findings

Uniform Follicles

Unifomed Follicles

Carcinomas often exhibit cells of various shapes and sizes that may crowd and overlap each other. However follicular carcinoma cells will be discretely arranged into uniform follicles.

May Invade Capsule

Invading Pill-capsule

The thyroid capsule is a thin covering that divides the thyroid gland into lobes. It serves as an attachment site for the gland to be anchored by connective tissue to the cricoid cartilage and tracheal rings. Follicular carcinoma is capable of invading this capsule, spreading to different lobes, and causing distortion of thyroid tissue.

Risk factors

Head and Neck Radiation

[Head and Neck Radiation-radio](#)

Similar to papillary carcinoma, follicular carcinoma patients may have been exposed to ionizing radiation in the form of treatment for other head and neck malignancies or nuclear fallout from atomic weapons or power plant accidents.