

THYROID FOLLICULAR ADENOMA

Benign thyroid follicular tumors are designated as follicular adenomas. Malignant counterparts traditionally have been divided into two major categories, follicular and papillary; some are called undifferentiated or anaplastic. The term goiter and struma simply refer to enlargement of the thyroid gland, whatever the cause. Originally, the term was popularly used to describe any swelling in the anterior part of the neck.

Follicular adenoma is a benign encapsulated tumor. It is a relatively common neoplasm and nearly always solitary and generally occurring in an otherwise normal gland. They are seen most often in middle aged women. Patients with follicular adenomas are generally euthyroid and consult a physician because of a painless lump. Related symptoms such as tracheal compression may occur and if there is sudden growth it usually is due to intratumor hemorrhage. On isotopic scan, the node is usually "cold" (hypofunctional). Most adenomas have a diameter of 1-3 cm. but occasionally lesions may be considerably larger and weigh some one hundred grams.

Microscopically, follicular adenomas show a great variety of architectural pattern, although there is no clinical importance associated with the subtype. There are four chief types: (1) trabecular/solid which shows few or no follicles being formed; (2) microfollicular with neoplastic follicles that are smaller than the neighboring normal gland with a ratio of cells to lumen being greatly altered in the direction of cells; and (3) Normo-follicular (simple), in which the size of the follicle approaches that of the nonneoplastic gland; (4) macrofollicular in which the follicles are larger than normal and may resemble those seen in hyperplastic nodules. Most follicular adenomas are of the trabecular or microfollicular type. Nuclei may be increased in size (as compared to the normal thyroid follicular cell), round to oval, and nucleoli are not prominent. Cytoplasm is apt to be scant and pale. Sometimes the follicular cell may look like a normal cell.

If the colloid is strongly and homogeneously eosinophilic, one should give some consideration that it may represent a follicular variant of papillary carcinoma. The capsule about an adenoma is expected to be complete but may be quite thin. Adjacent normal thyroid is usually present. Degenerative changes such as hemorrhage, thrombosis, fibrosis and hyalinization, calcification, metaplastic ossification and cyst formation may occur. If the cells appear to be oncocytes, we speak of a Hurthle cell adenoma; another variant is an adenoma with clear cell change. In some adenomas, there are bizarre nuclei characterized by their huge size, irregular shape, and hyperchromasia. These do not indicate malignancy.

Standard therapy for follicular adenoma is surgical removal in the form of lobectomy.