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## Oncocytic Nodule/ Hürtle Cell Tumors

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Formerly oncocytic lesions were regarded as a definite entity, but this classification is no longer used. Cytopathologists define oncocytic cells as follows: “Oncocytic follicular cells in the thyroid, known as Hürtle cells, are characterized by large size, polygonal to square shape, distinct cell borders, voluminous granular and eosinophilic cytoplasm, and a large, often hyperchromatic nucleus with prominent cherry pink macronucleoli”. The proliferation of oncocytes gives rise to hyperplastic and neoplastic nodules. Oncocytic cells may behave as follicular thyroid carcinomas including capsular and vascular invasion, or they may behave as papillary thyroid carcinomas showing papillary architecture.

### Features

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It is unlikely that oncocytic nodules will have any specific characteristics on ultrasound.

### Cytologic Morphology

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The material is often cellular containing oncocytic cells with characteristic abundant eosinophilic cytoplasm and round nuclei with fine dispersed chromatin. The material is either devoid of colloid or contains just a sparse amount. As for follicular neoplasm with ordinary follicular epithelium, the finding of some colloid in material rich with oncocytic epithelium does not exclude a diagnosis of neoplasm. From many follicular lesions the yield of material may be bloody and the amount of epithelium scant. Puncture with a 27-gauge needle without aspiration may reduce the amount of blood and achieve a more cellular specimen.

Examples of oncocytic cells can be found on the following pages: Colloid nodules, page 59; in follicular adenomas, pages 95, 99; in follicular thyroid carcinomas, pages 101, 109, 119; in follicular variant of papillary thyroid carcinoma, page 139; and in thyroiditis, pages 237, 241.