

Endocrine System 1

Third Year Class

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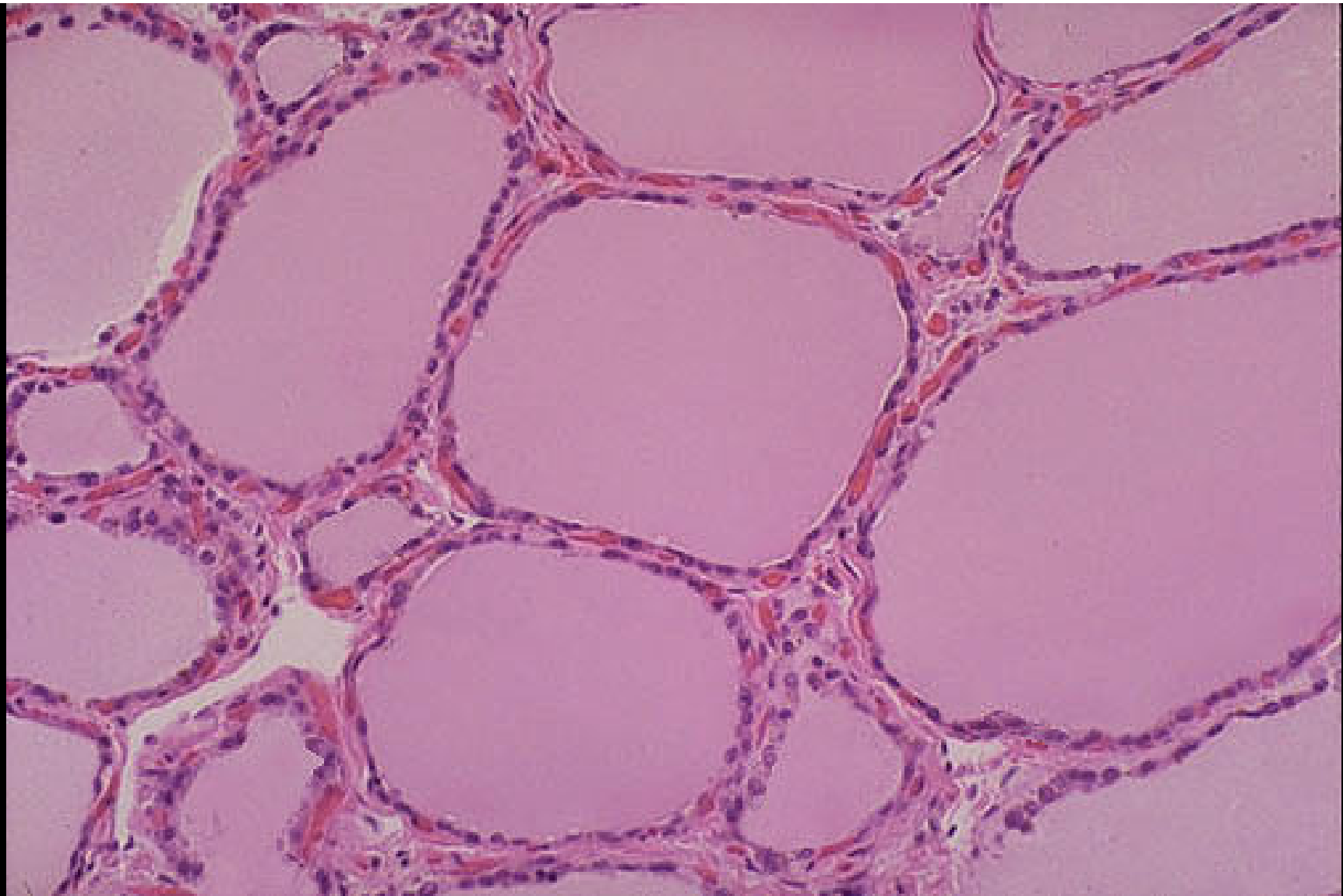
TUCCOM



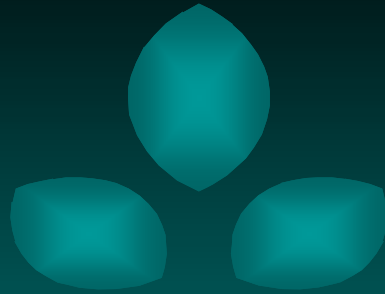
NORMAL THYROID

This is the normal appearance of the **thyroid** gland on the anterior trachea of the neck. The thyroid gland has a right lobe and a left lobe connected by a narrow isthmus. The normal weight of the thyroid is 10 to 30 grams



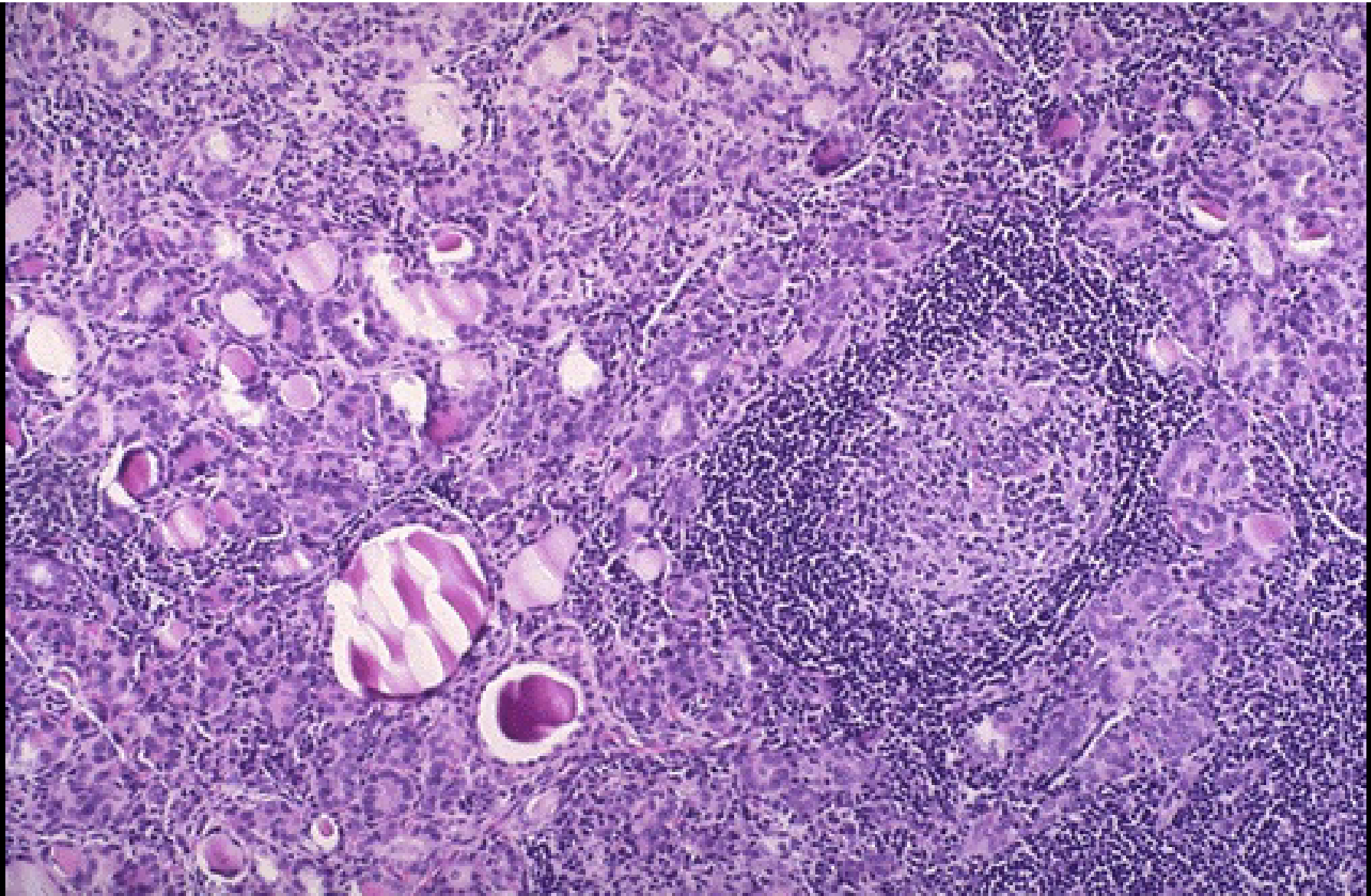


Normal thyroid seen microscopically consists of follicles lined by a simple cuboidal epithelium and filled with colloid. The follicles vary somewhat in size. The interstitium, which may contain "C" cells, is not prominent.

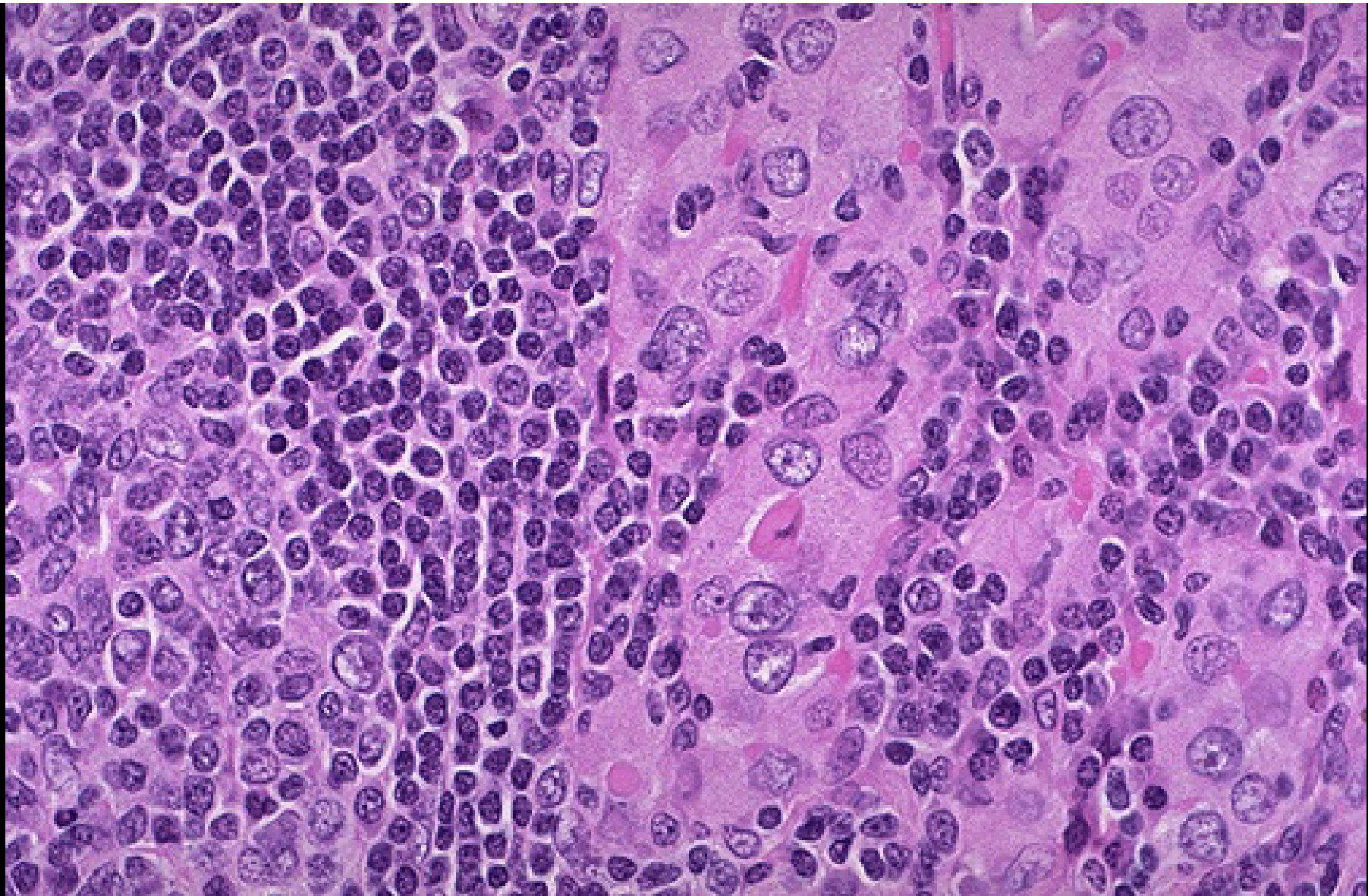


Hashimoto's Thyroiditis





Low power microscopic view of a thyroid with **Hashimoto's thyroiditis**. Note the lymphoid follicle at the right center



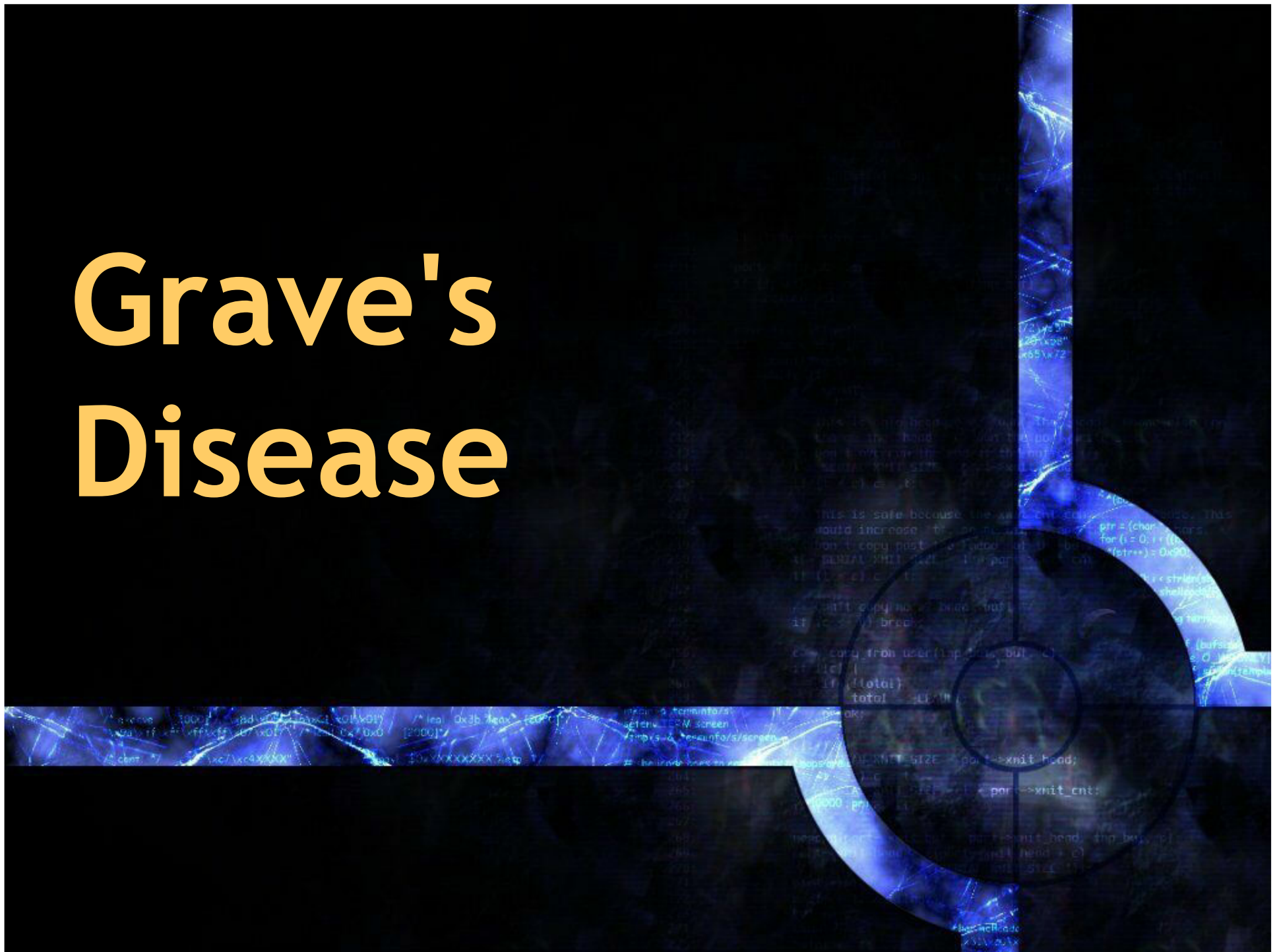
Hashimoto's thyroiditis demonstrates the pink Hurthle cells at the center and right. The lymphoid follicle is at the left.

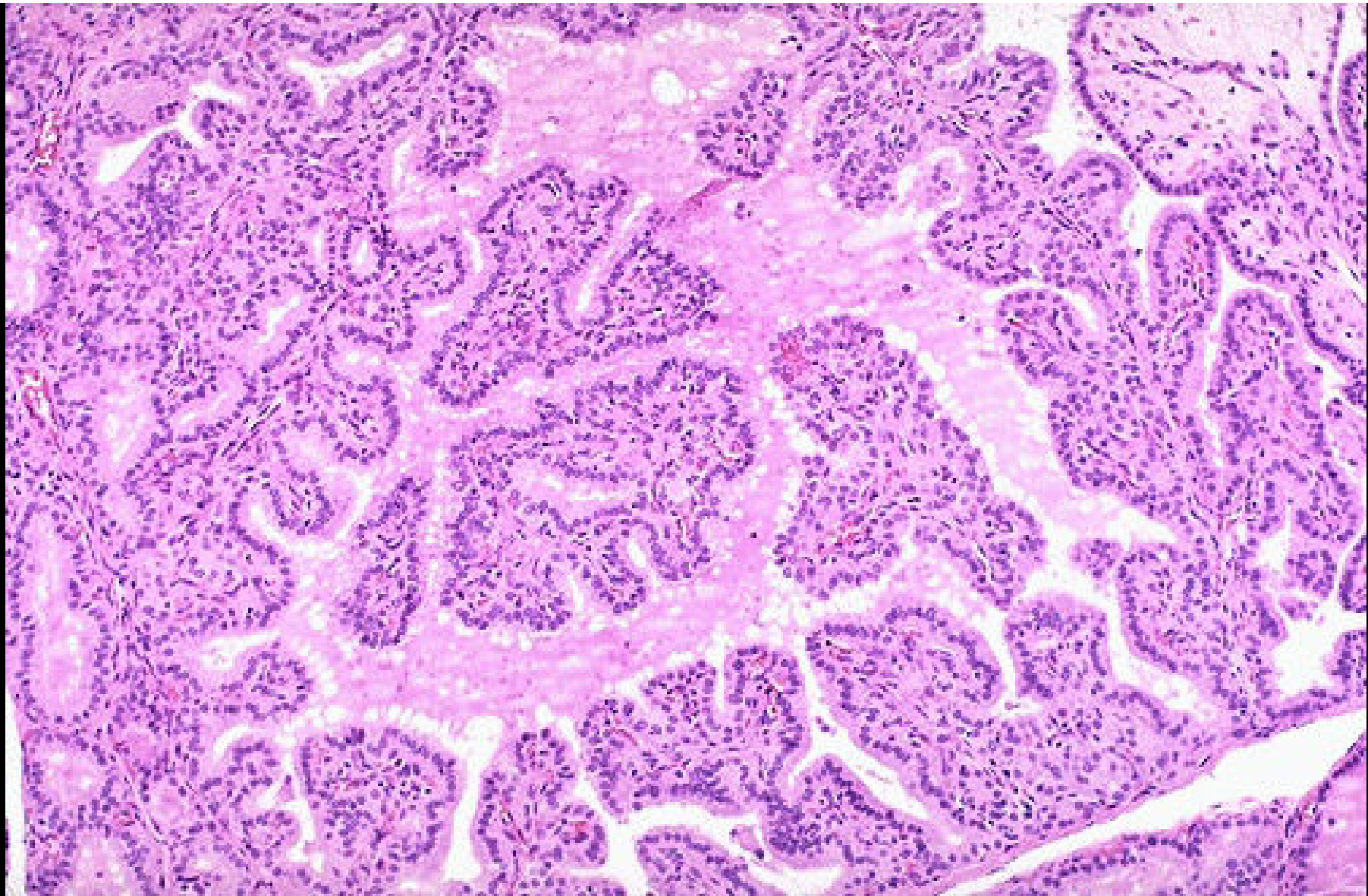
Nodular Goiter



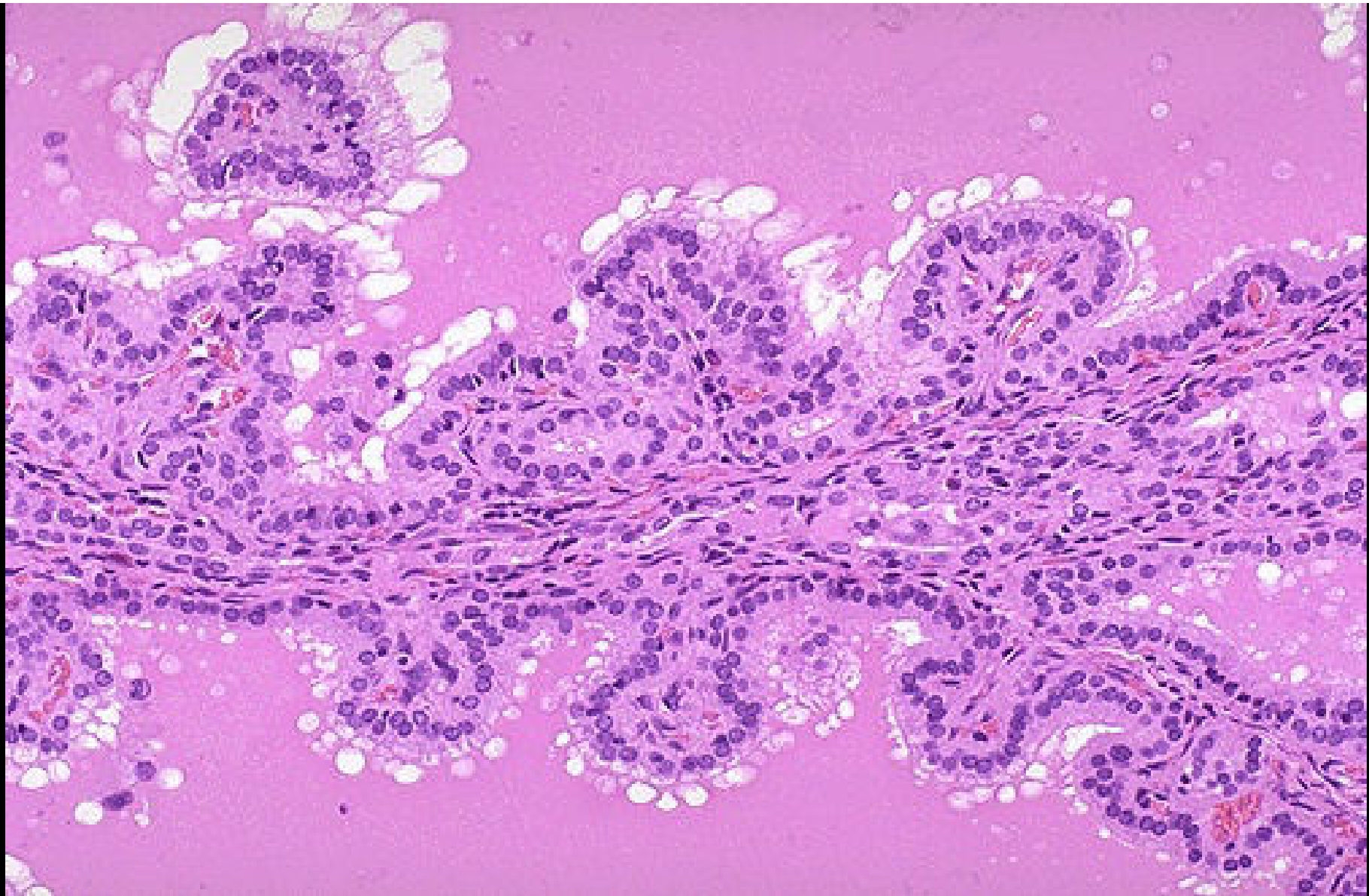
This diffusely enlarged thyroid gland is somewhat nodular,
thyroid--a nodular goiter

Grave's Disease



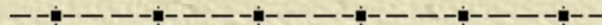


A diffusely enlarged thyroid gland associated with hyperthyroidism is known as **Grave's disease**. At low power here, note the prominent infoldings of the hyperplastic epithelium



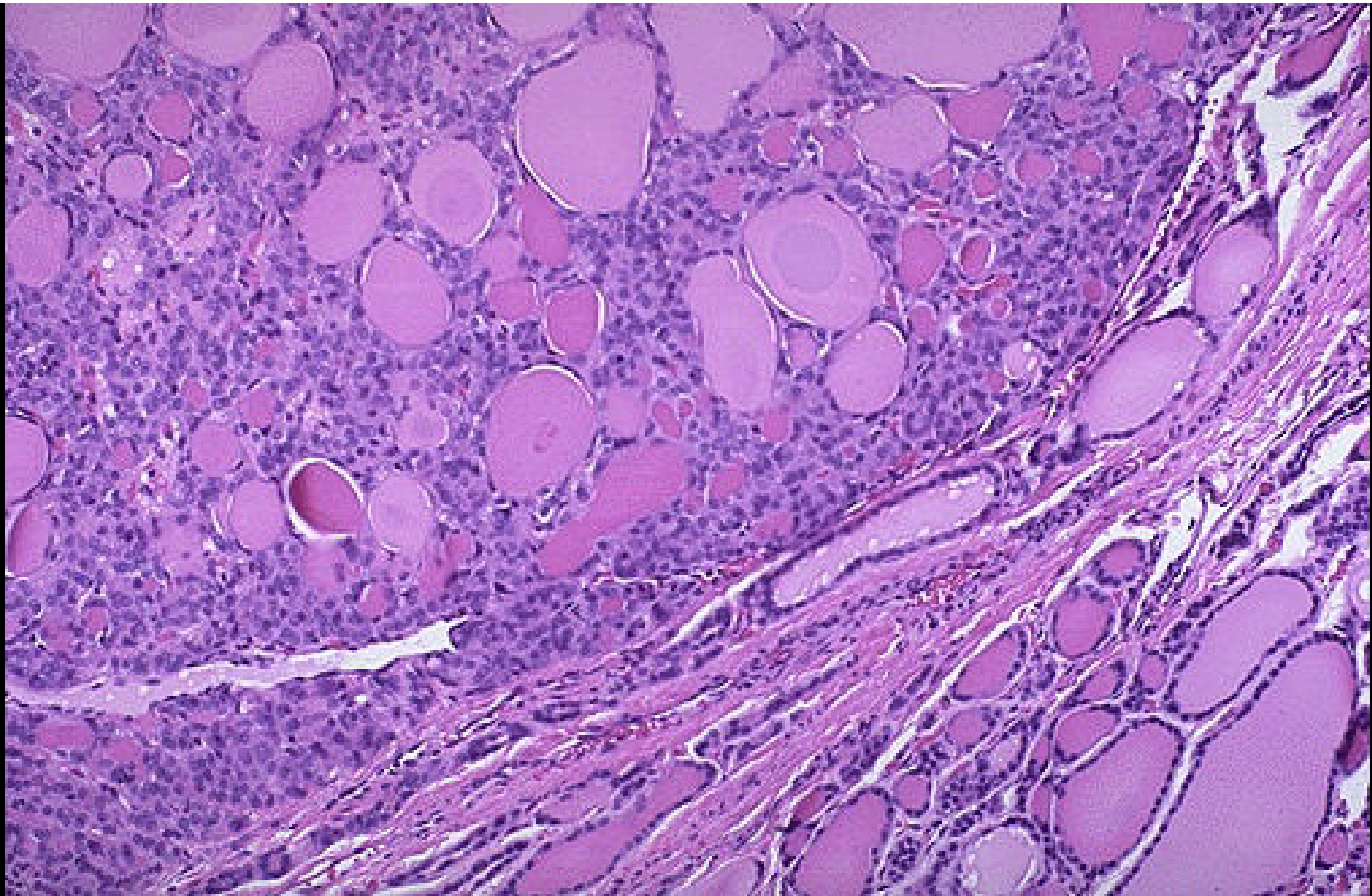
At high power, the tall columnar thyroid epithelium with **Grave's disease** lines the hyperplastic infoldings into the colloid. Note the clear vacuoles in the colloid next to the epithelium where the increased activity of the epithelium to produce increased thyroid hormone has led to scalloping out of the colloid

Follicular Neoplasm





This is **follicular neoplasm** (a follicular adenoma histologically) that is surrounded by a thin white capsule.



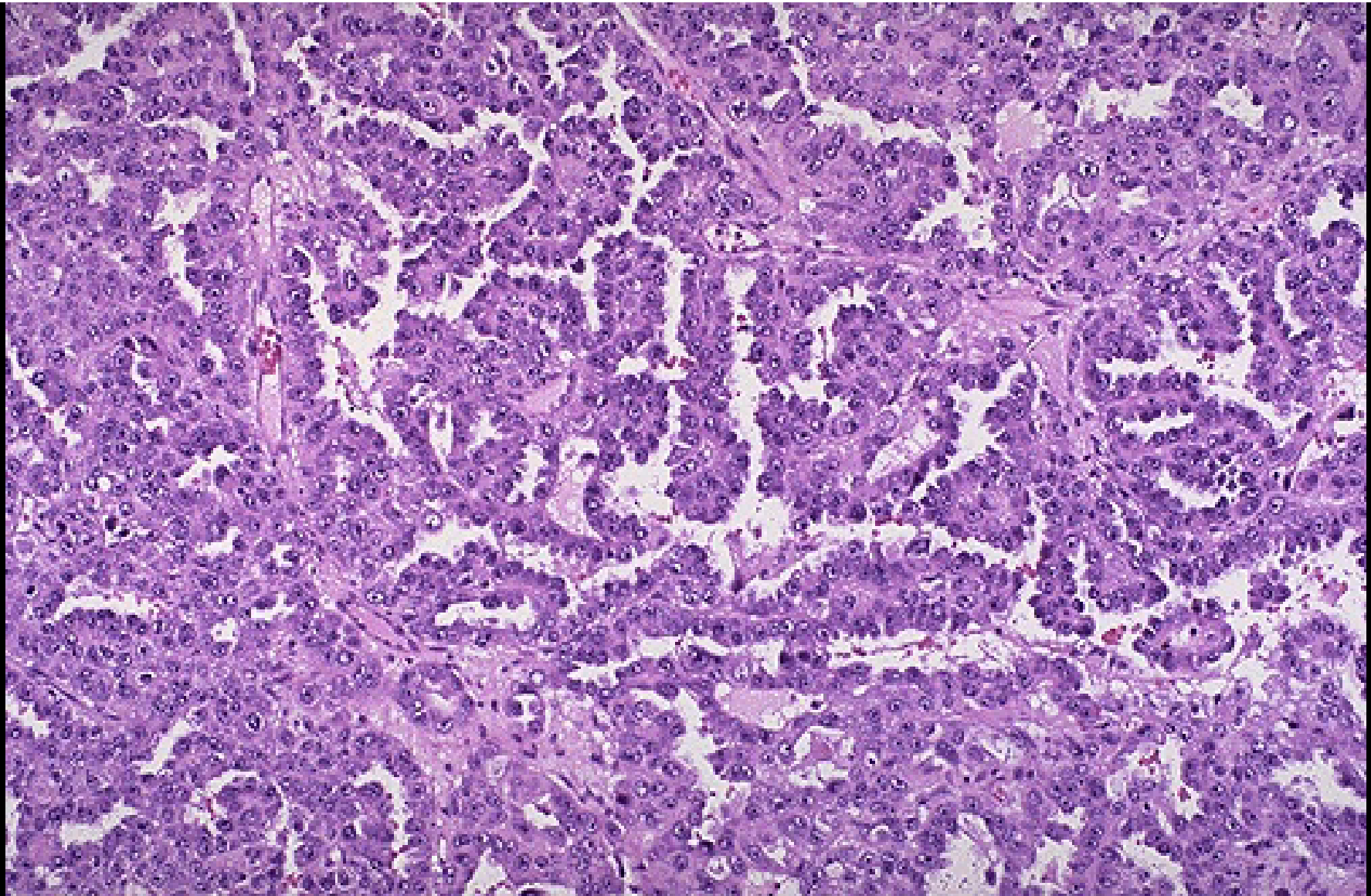
Normal thyroid follicles appear at the lower right. The **follicular adenoma** is at the center to upper left. This adenoma is a well- differentiated neoplasm because it closely resemble normal tissue. The follicles of the adenoma contain colloid, but there is greater variability in size than normal.

Papillary Carcinoma

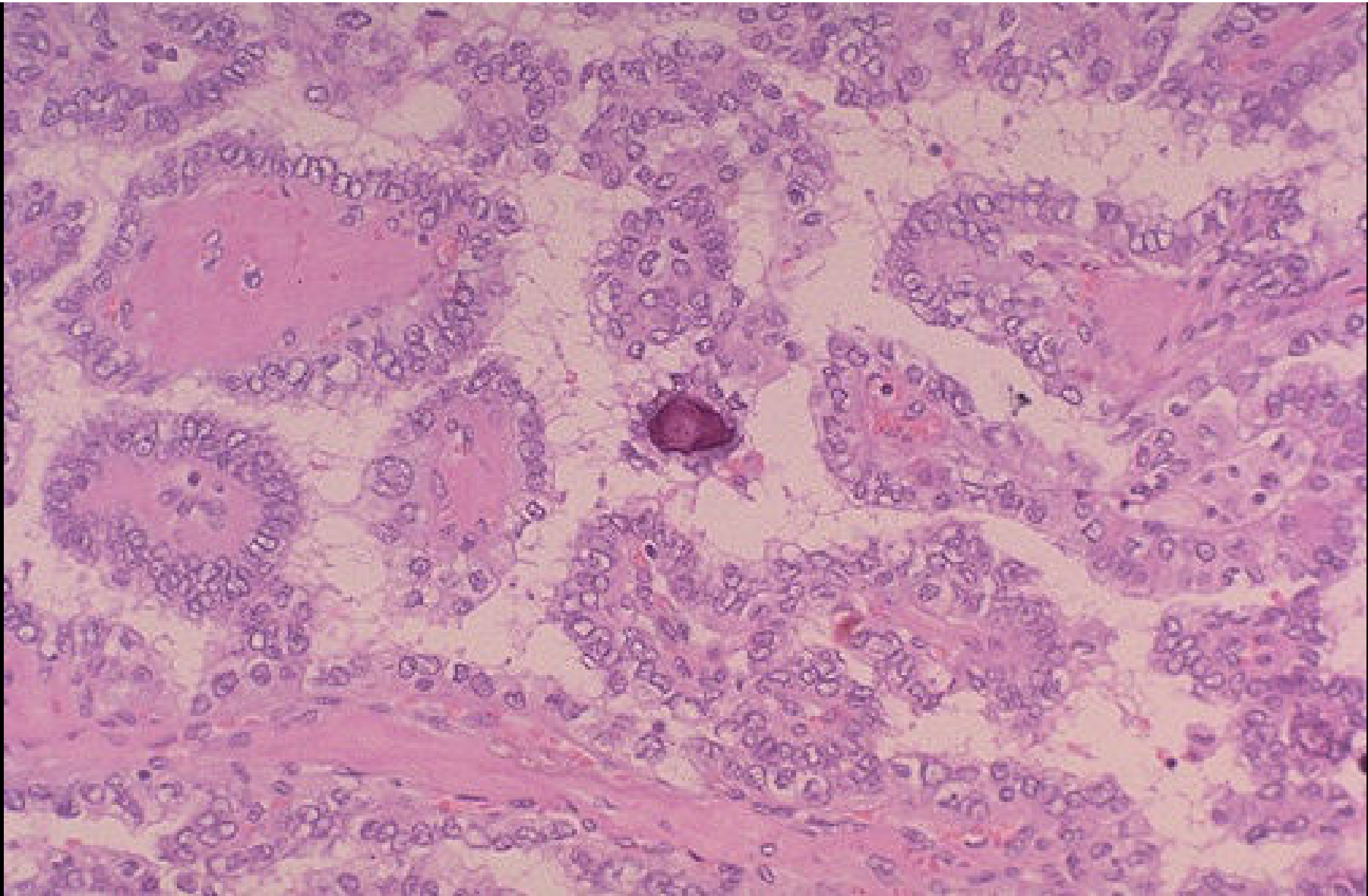




Papillary Carcinoma. The larger mass is cystic and contains papillary excrescences.



A **papillary carcinoma** of the thyroid. The fronds of tissue have thin fibrovascular cores. The fronds have an overall papillary pattern.



This is **papillary carcinoma** of thyroid. small psammoma body in the center.
The cells of the neoplasm have clear nuclei.