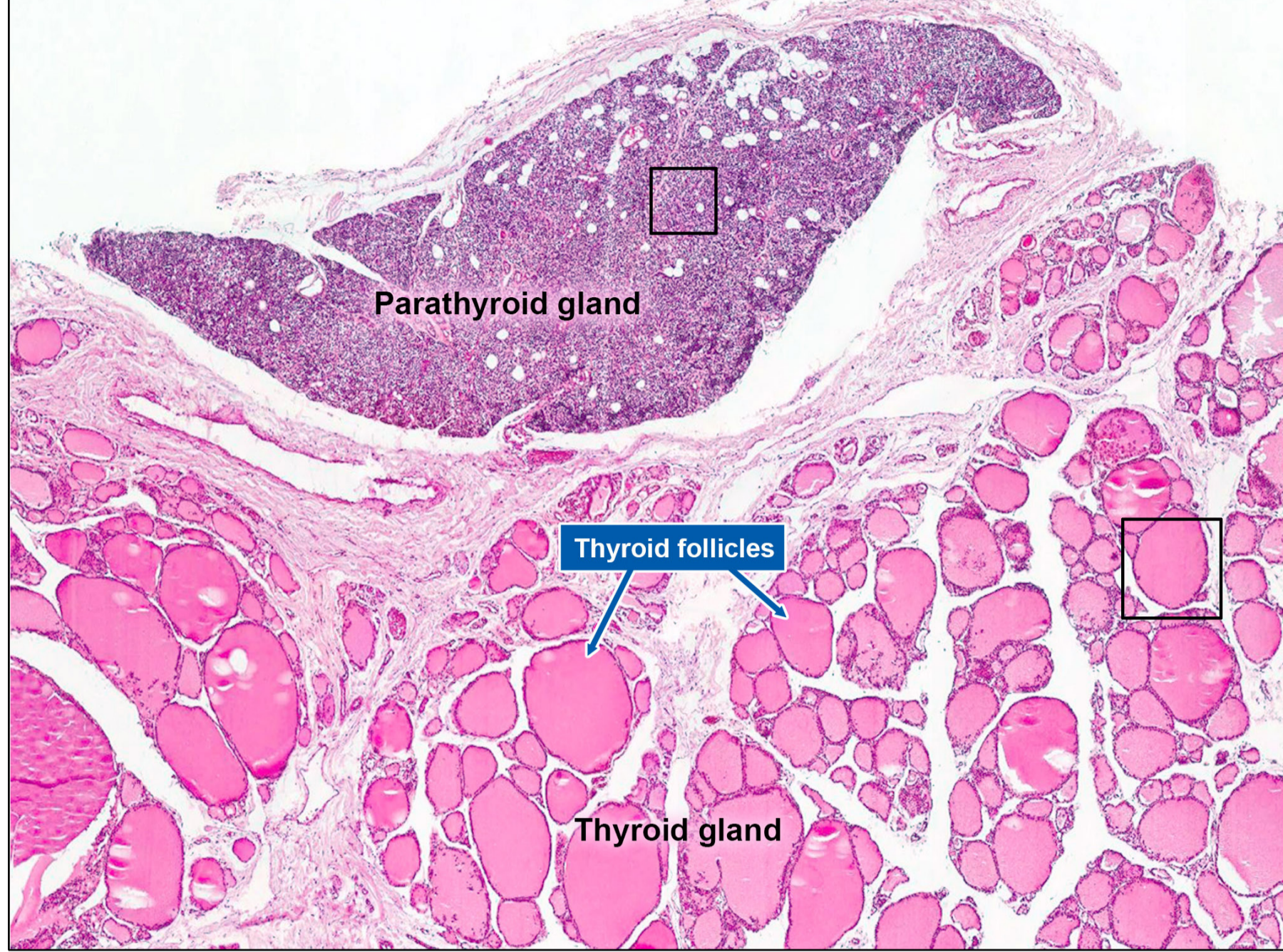


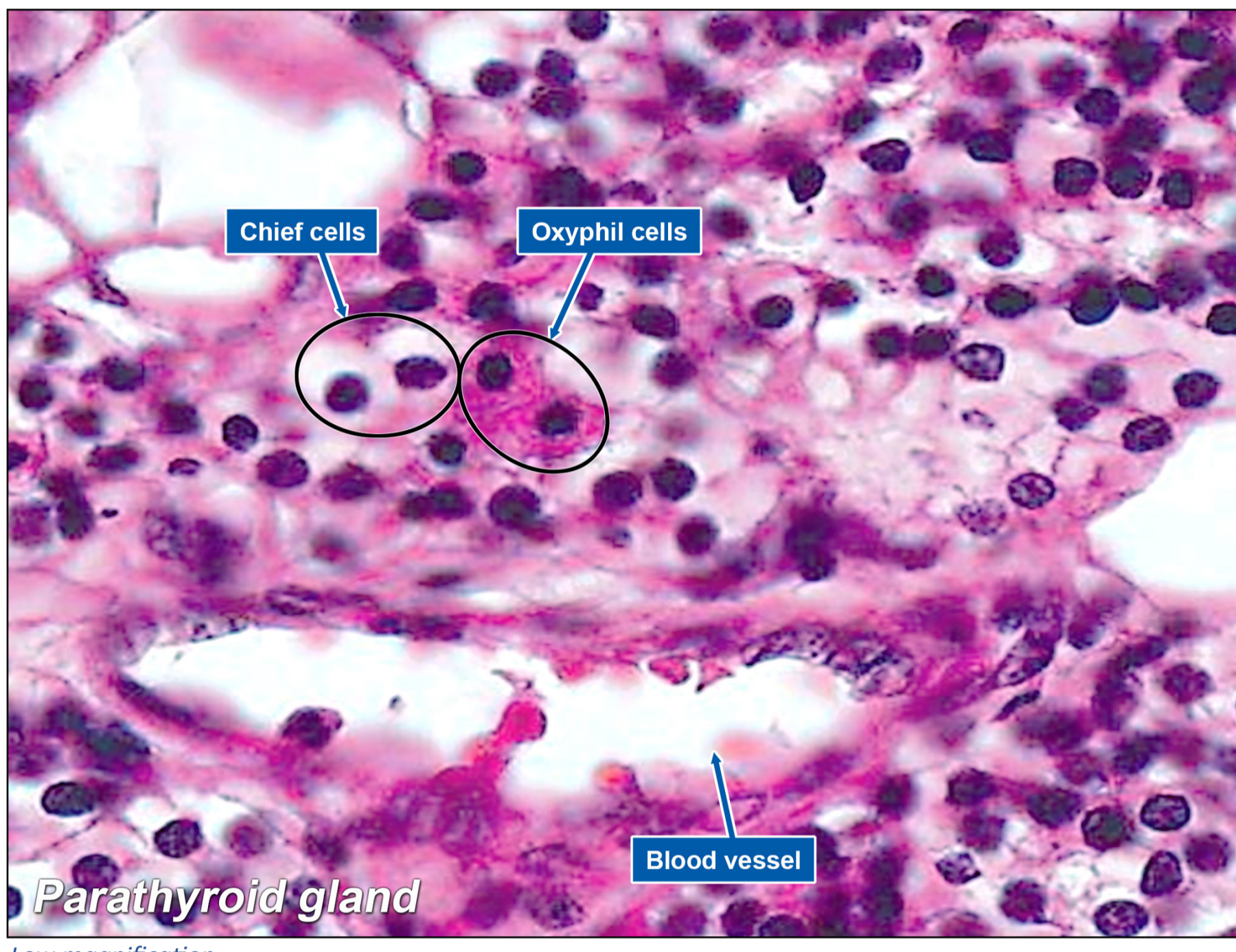
THYROID GLAND

Endocrine System

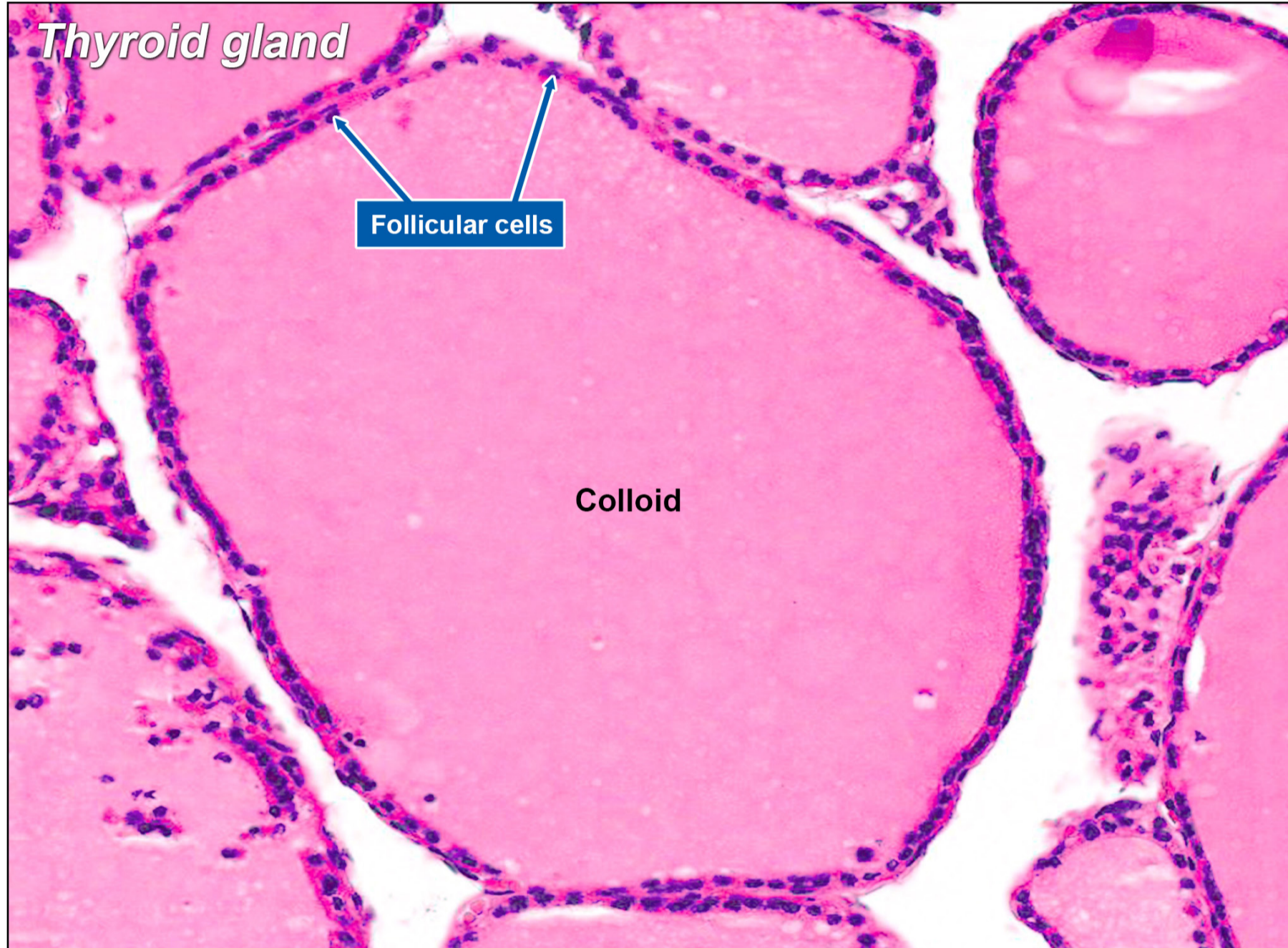
Thyroid gland produces thyroid hormones and polypeptide hormone calcitonin. This hormone governs the basal metabolic rate in cells.



Low magnification



Low magnification



High magnification

- Each lobule is made from an aggregation of thyroid follicles.
- Thyroid follicles are of varying sizes, are lined by simple cuboidal epithelium (follicular cells) and central lumen densely filled with gelatinous acidophilic colloid.
- Follicular cells also known as thyrocytes are epithelial cells. From cuboidal to columnar based on function. They secrete thyroid hormones. It is regulated by TSH from the anterior pituitary.
- Active glands have more follicles with low columnar epithelium.
- The thyroid hormones produced by the thyroid gland are- Thyroxine (tetra-iodothyronine - T₄) and Triiodothyronine (T₃).
- Goitre results from excessive TSH leading to thyroid gland enlargement.
- Thyroid glands also have "C-cells" which produce calcitonin.
- The "C-cells" are located in between thyroid follicles.
- Calcitonin is a hormone that plays a role in regulating the level of calcium in your blood by decreasing it.
- Having abnormal levels of calcitonin in your body seems to have no direct negative side effects.