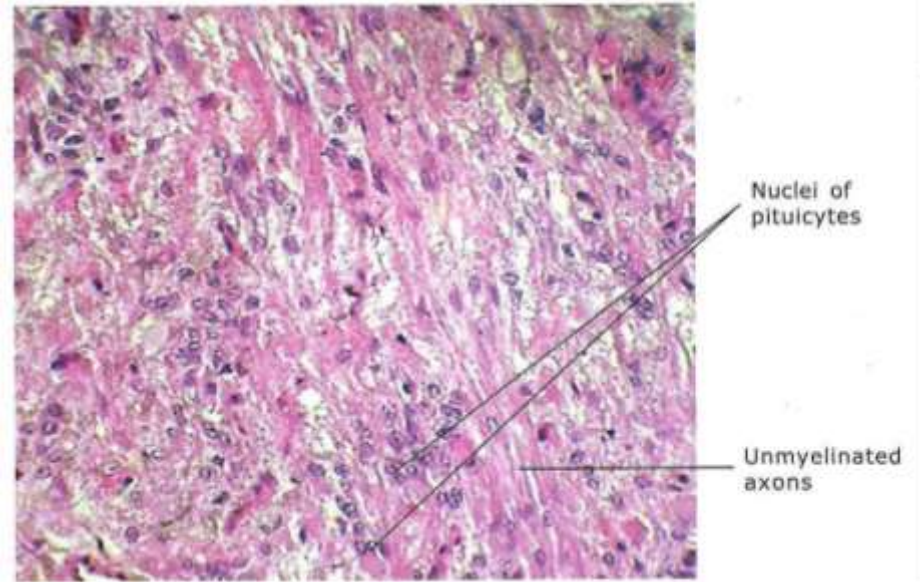
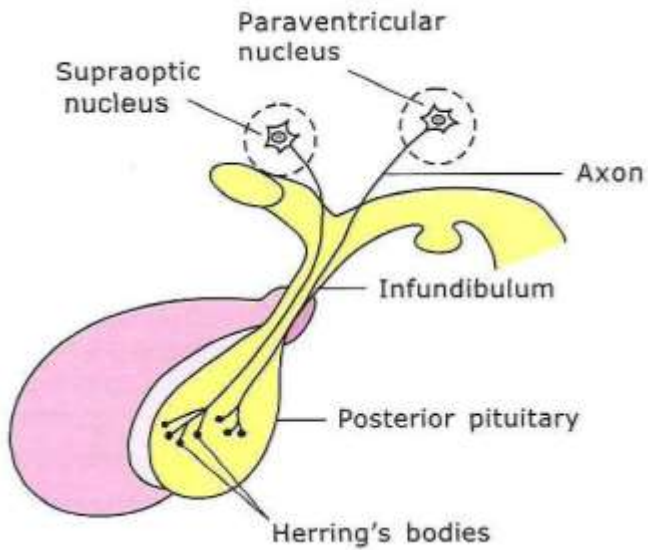


Histology of the Endocrine Glands

LAB 2022

Dr AMAL ALBTOOSH

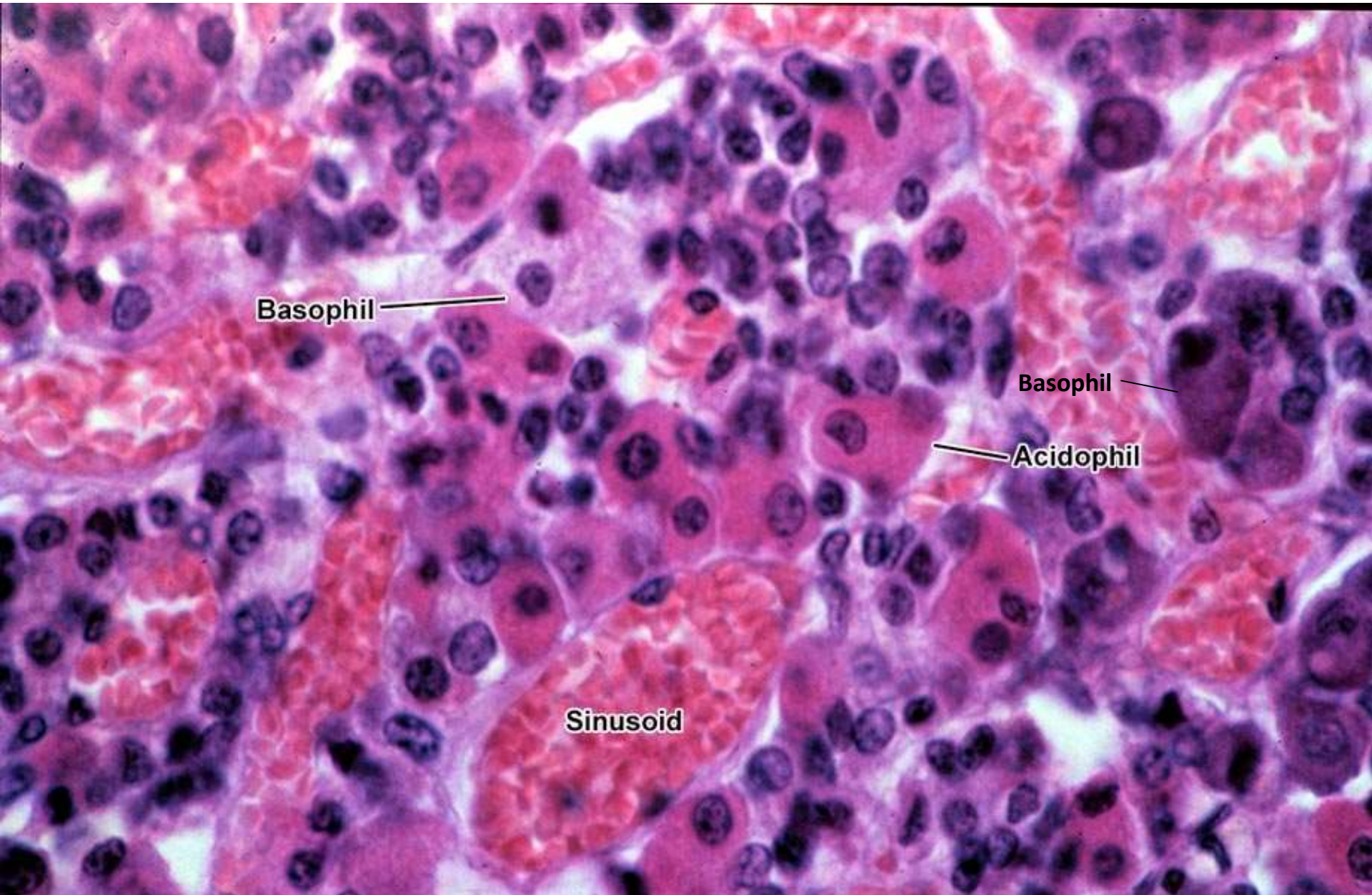
Posterior Pituitary



Pituitary gland

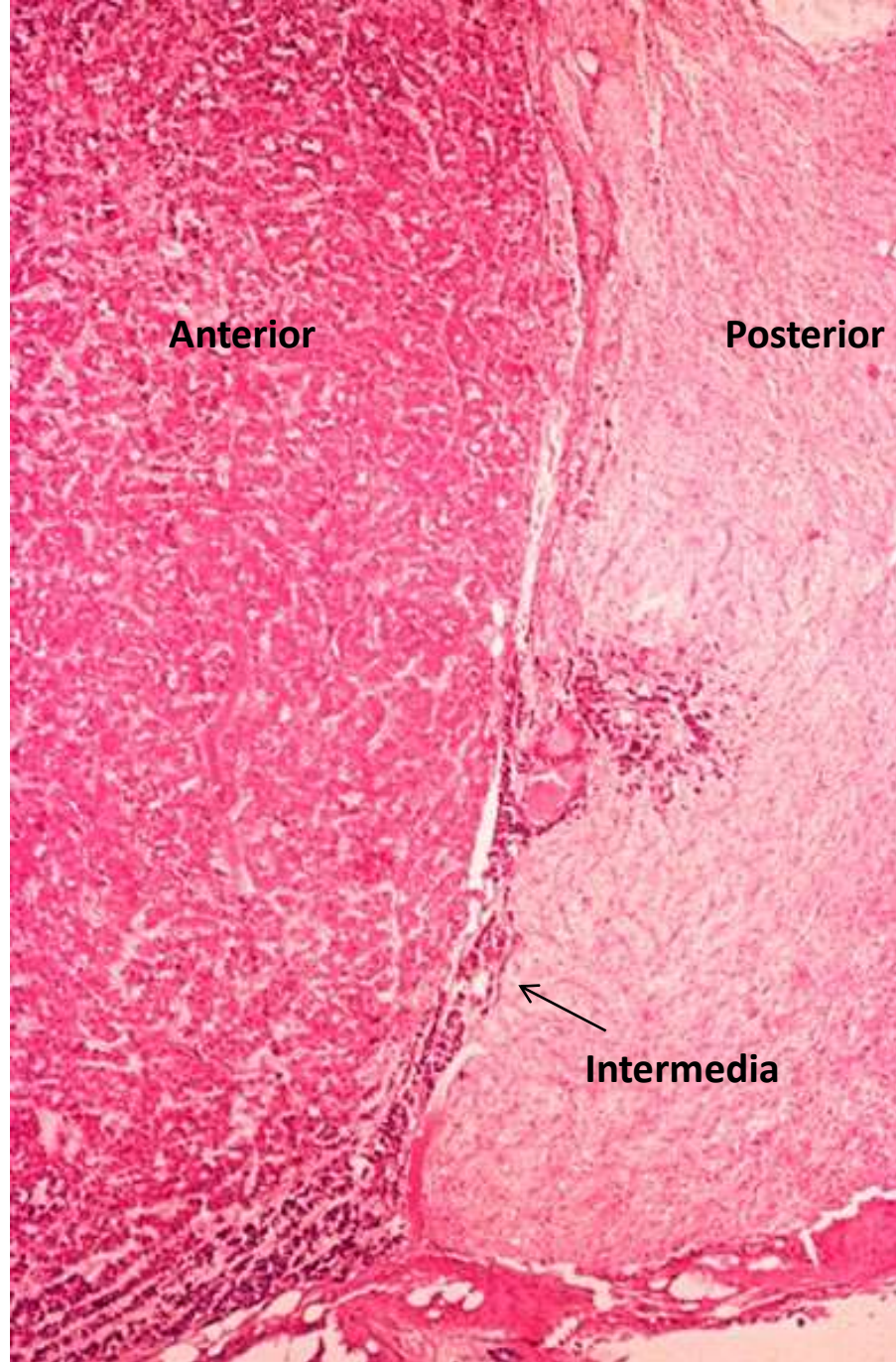


Anterior pituitary (H&E stain)

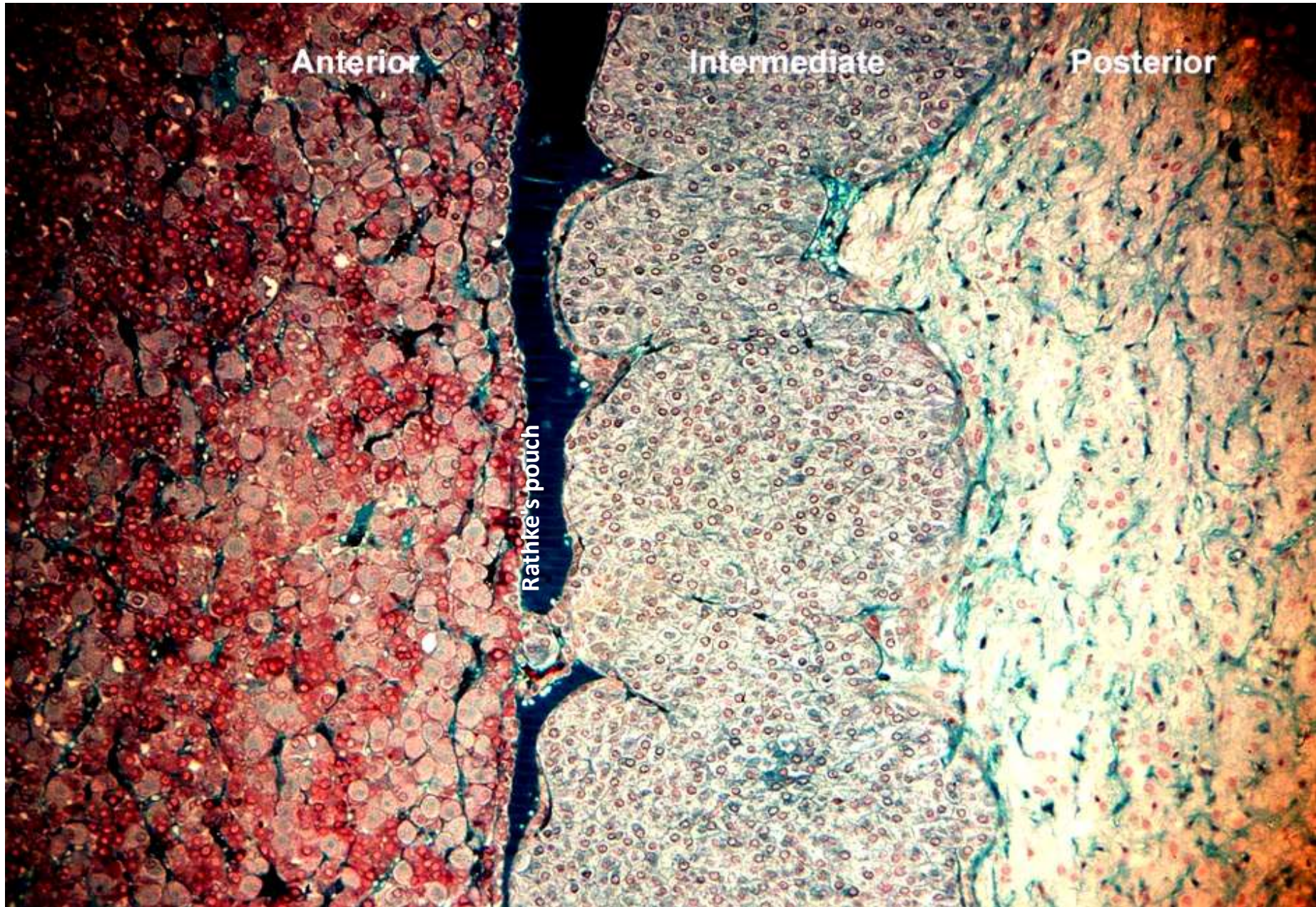


**Pars intermedia,
between anterior and
posterior pituitary**

**(Poorly developed and of
doubtful function in
humans)**

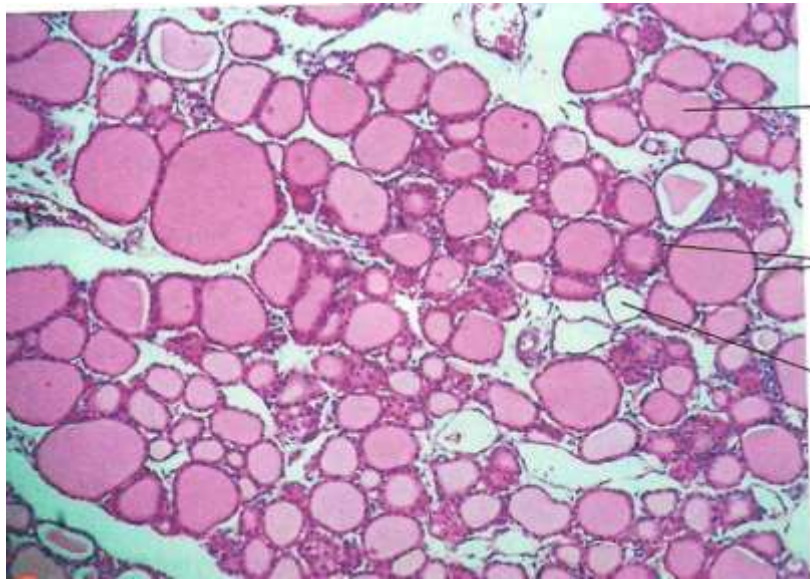


Pars intermedia (rat pituitary)



THYROID GLAND

Microscopic structure

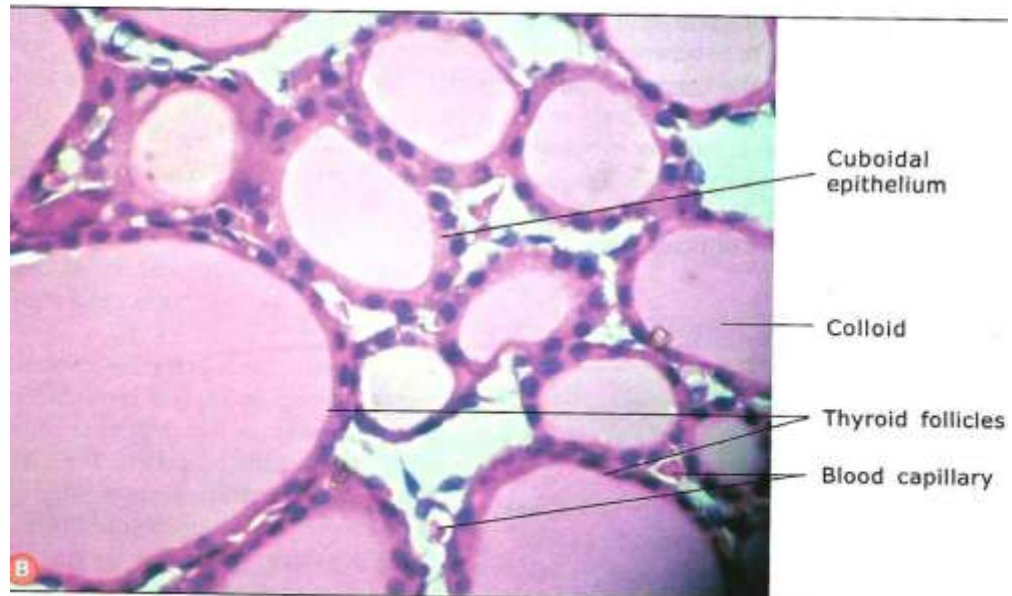
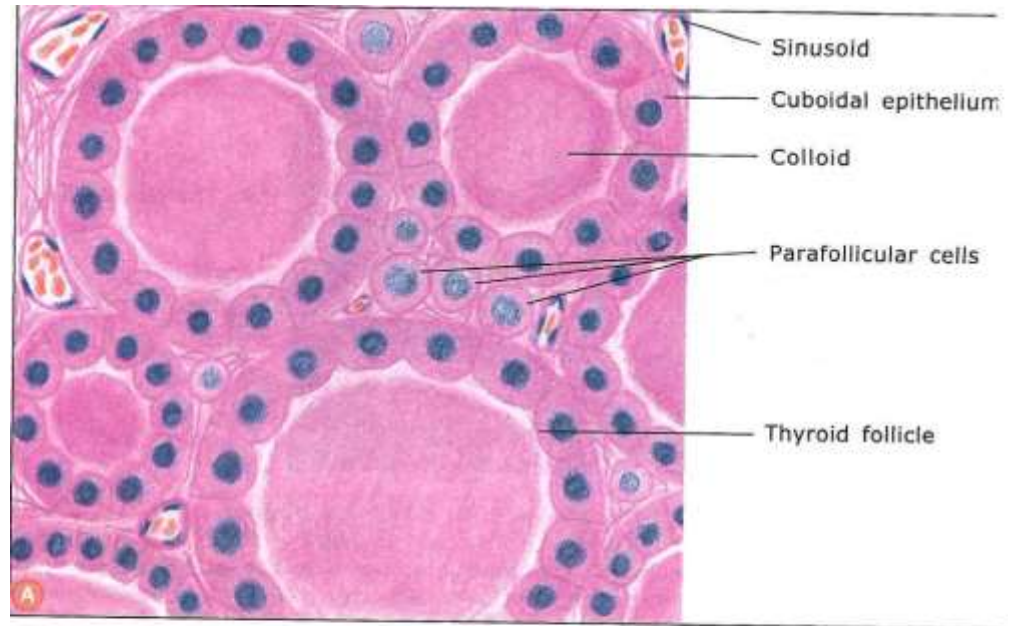


Colloid

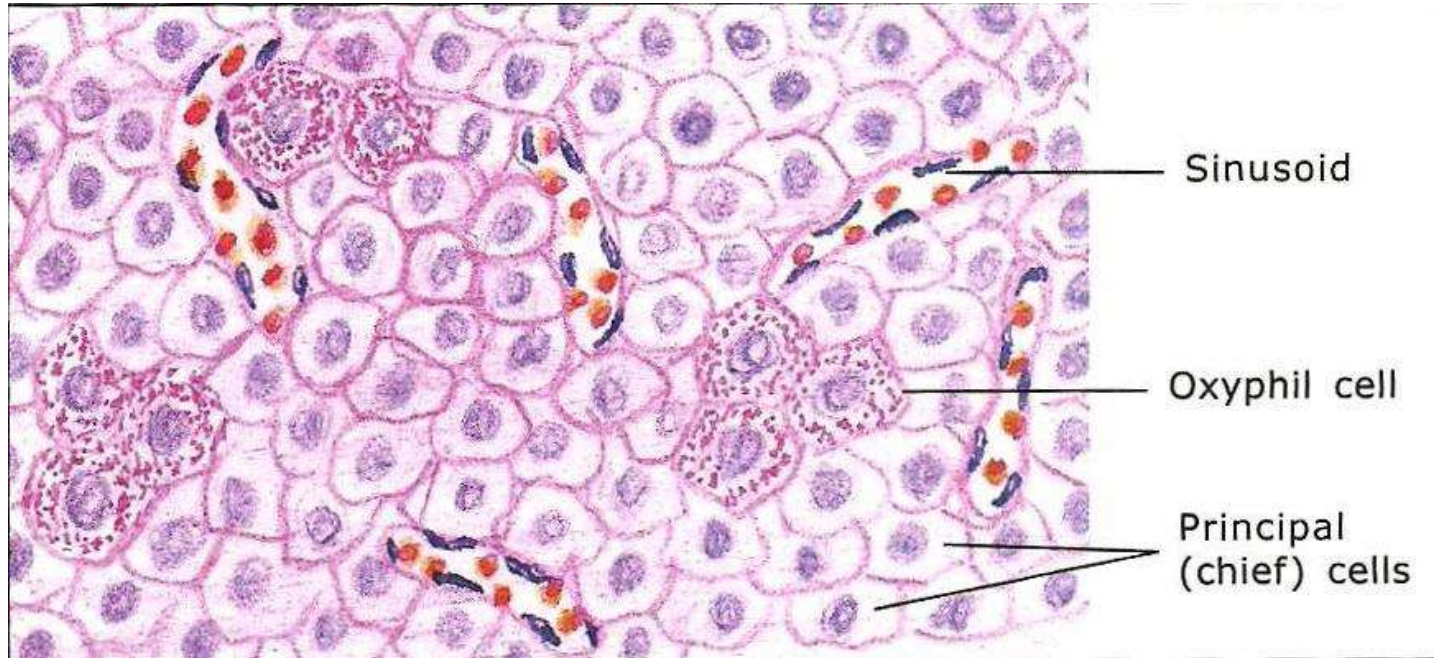
Thyroid follicles

Blood vessel

THYROID GLAND

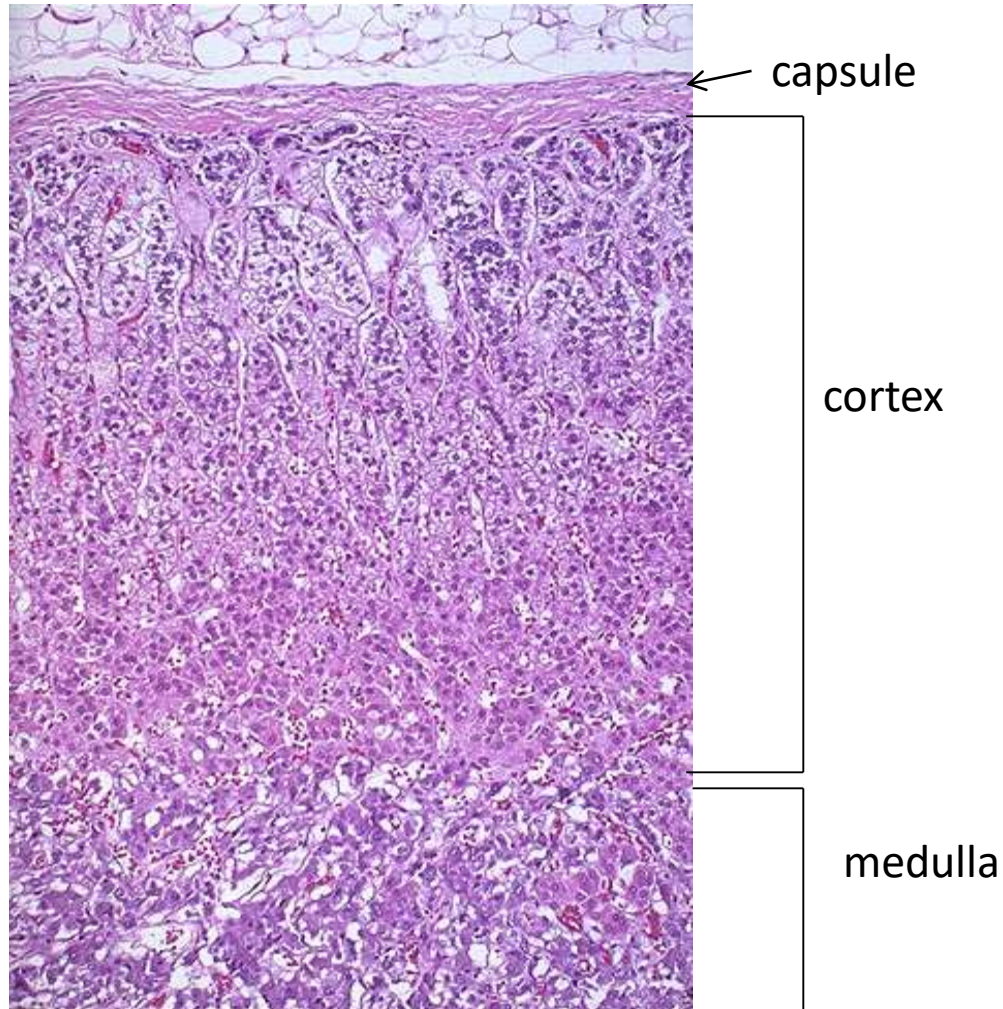


Parathyroid Gland (H&E stain)

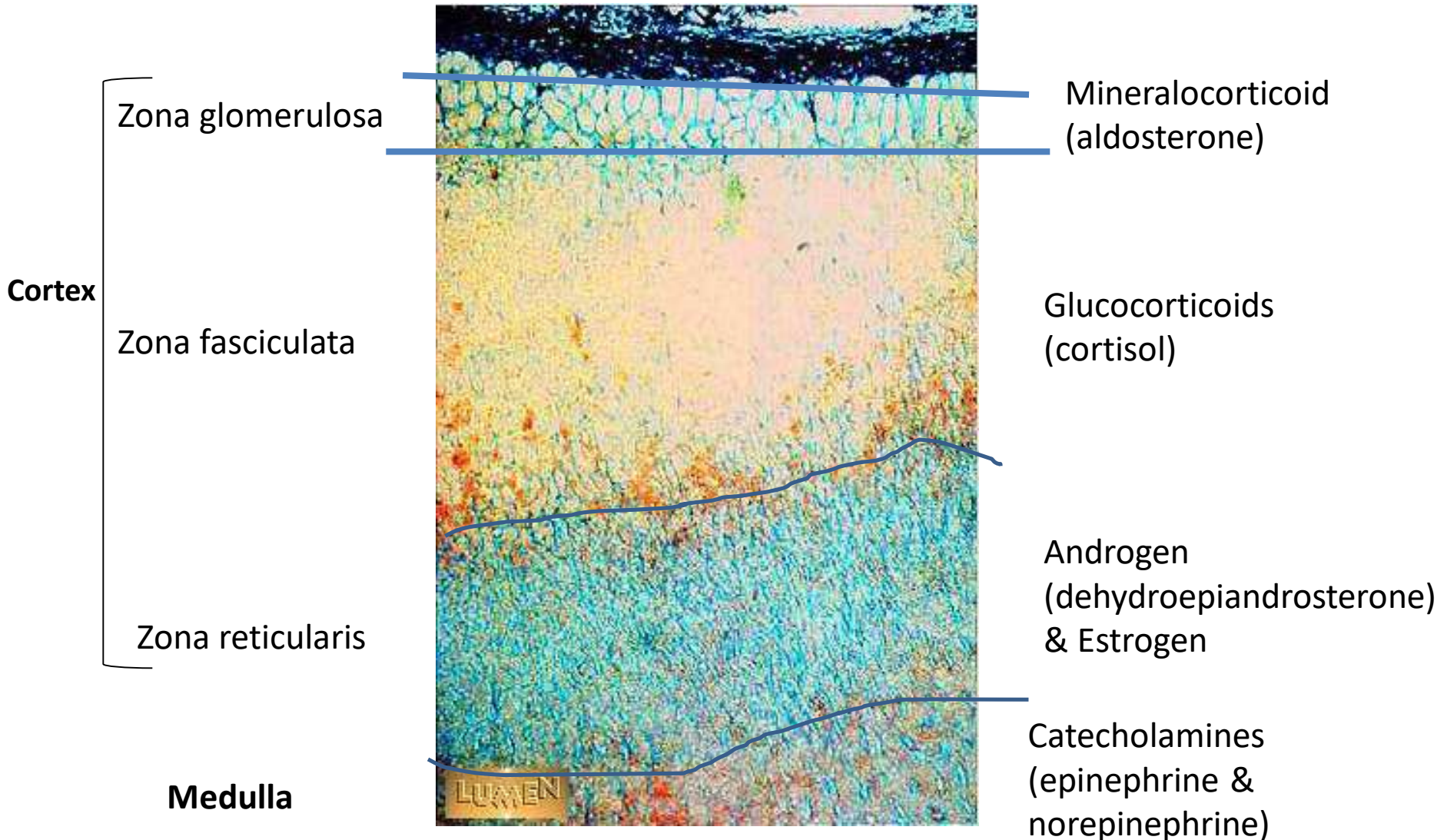


Adrenal Gland Microscopic structure (low power)

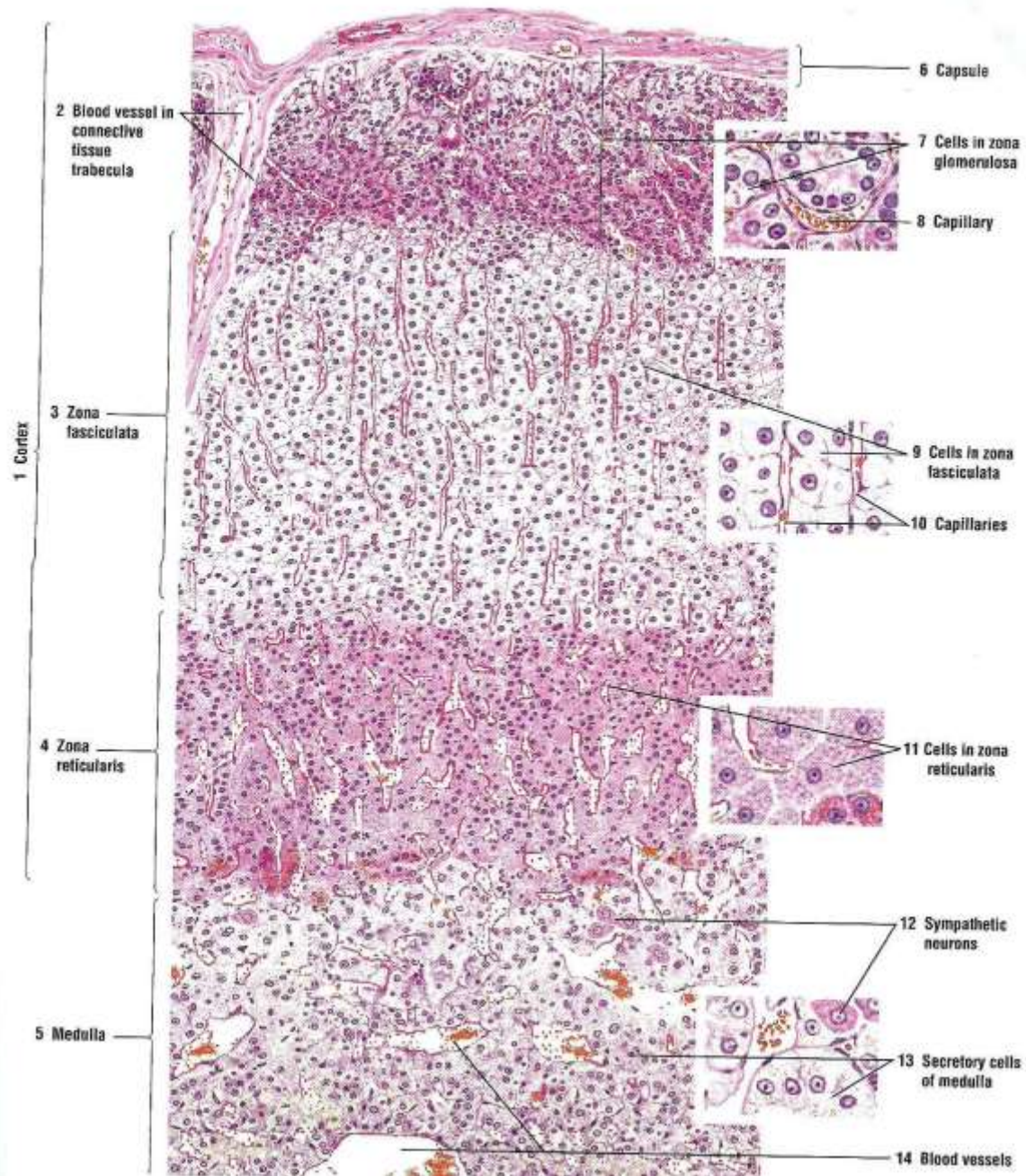
- The gland is covered by connective tissue capsule.
- Capsule sends septa inside the gland.
- 2 parts:
 - ✓ Cortex
 - ✓ Medulla



Microscopic structure (low power)

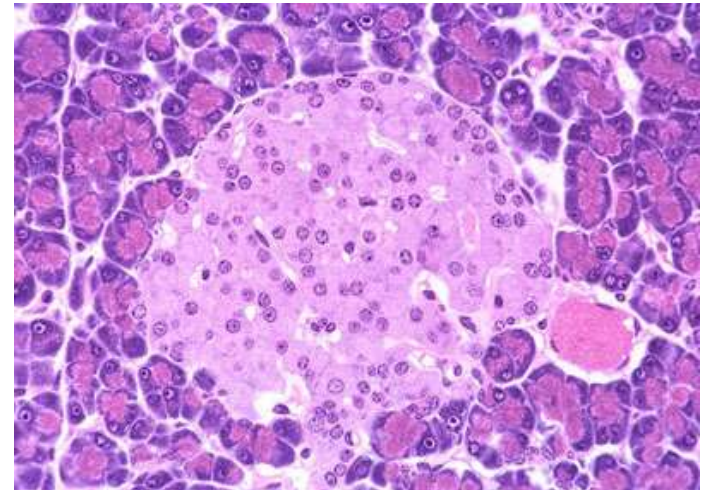
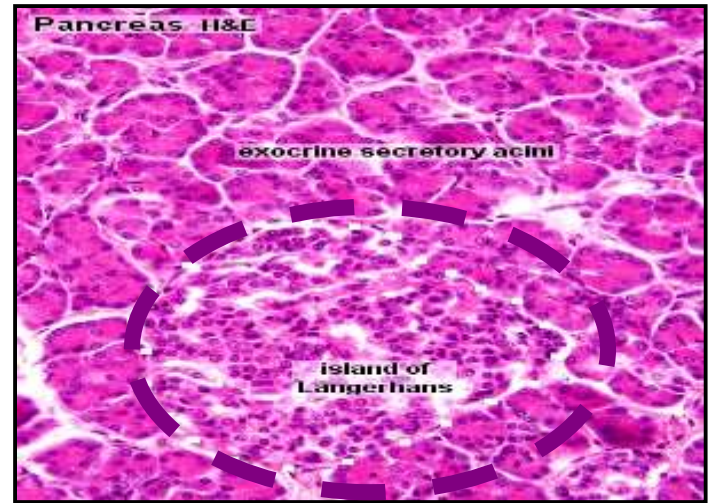
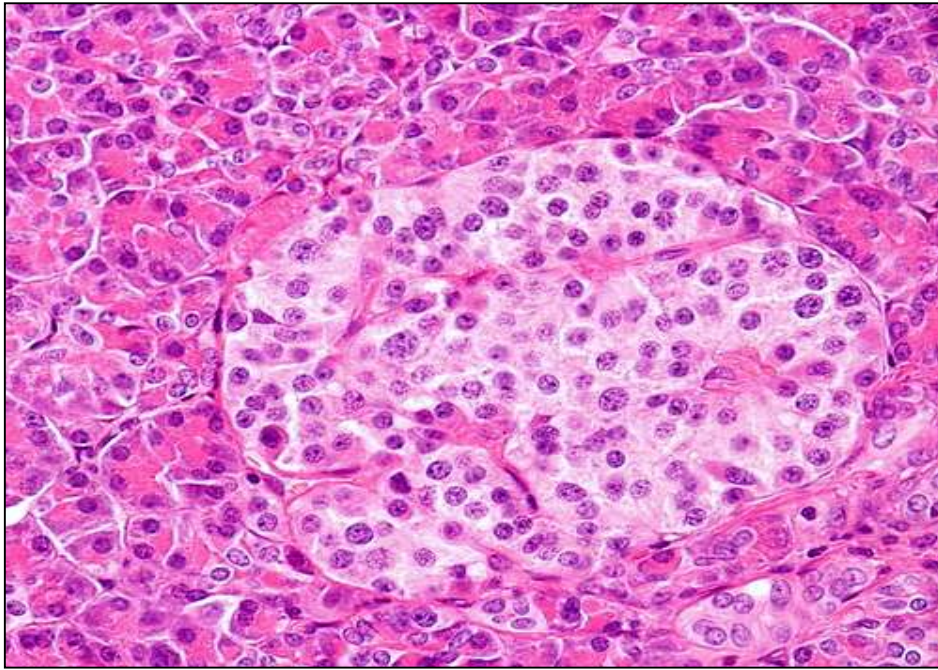


ADRENAL GLANDS



PANCREAS

Endocrine part: Islets of Langerhans



Diffuse neuroendocrine system

- Apudocytes or **APUD cells**
- Classification according to staining activity
- 1. **Argentaffin cells**: ppt silver in absence of reducing agent
- 2. **Argyrophilic cells**: ppt silver in presence of reducing agent
- 3. **Chromaffin like cells**: bind K dichromate

• Mode of action

1. **Endocrine** → target organ
2. **Paracrine** → surrounding tissue
3. **Autocrine** → themselves
4. **Neuroendocrine** → neurosecretion

