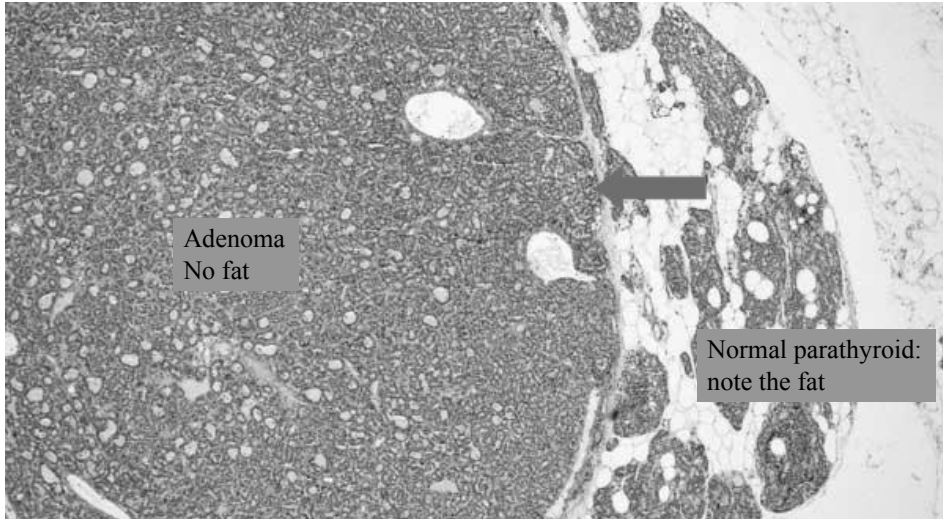


# Endocrine System 2023 Lab material

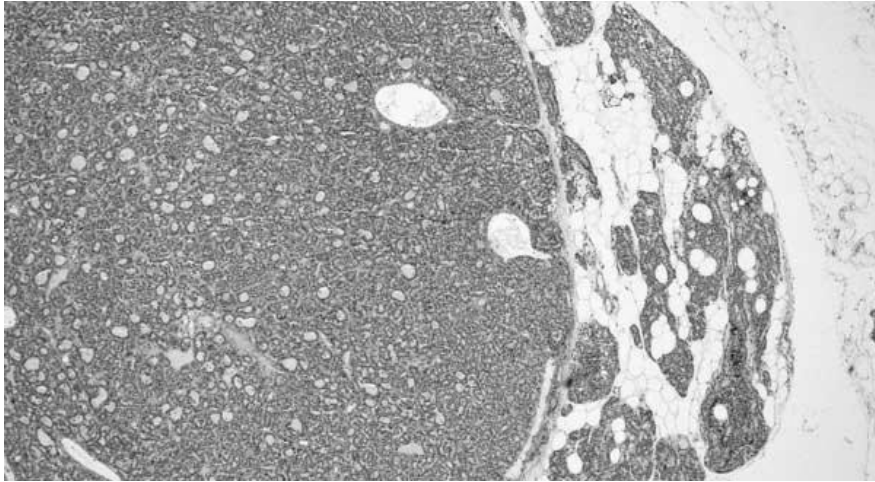
Dr Heyam Awad

- These slides were explained within the lectures.
- Study these slides only for your practical exam ( regarding my material)

Parathyroid adenoma. Note the thin capsule (arrow) separating the adenoma from normal. Note also the fat in the normal gland. There is no fat in the adenoma.

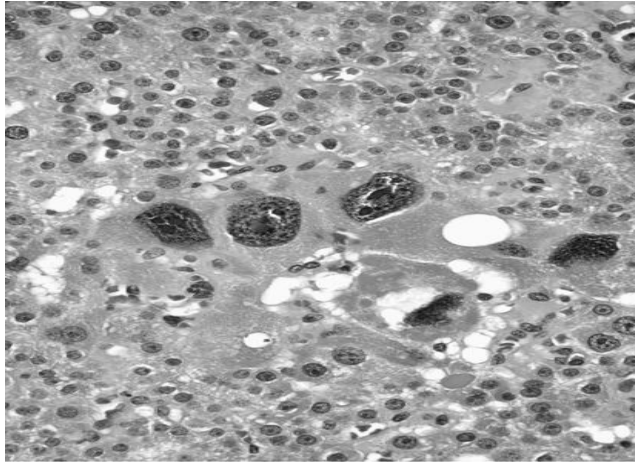


# Parathyroid adenoma

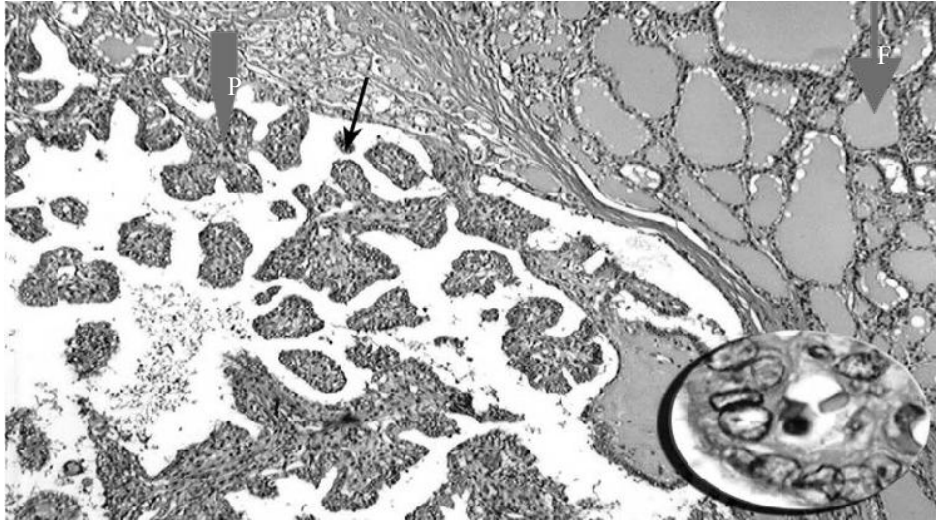




Endocrine atypia.. This is not necessarily a malignant feature.



Papillae in papillary thyroid carcinoma(P).  
Note the difference from the normal follicles (F)  
F)

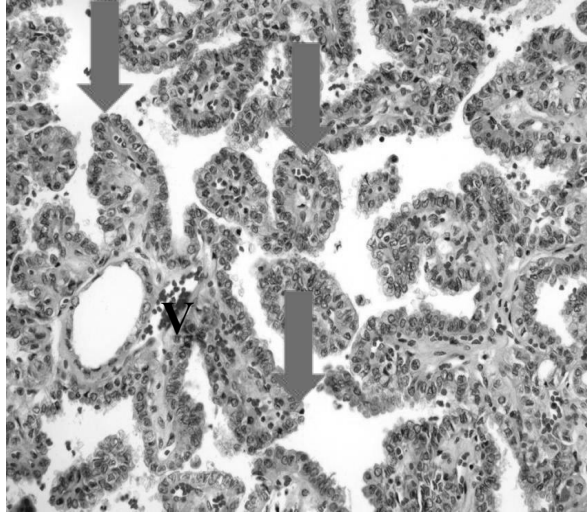


## Papillae

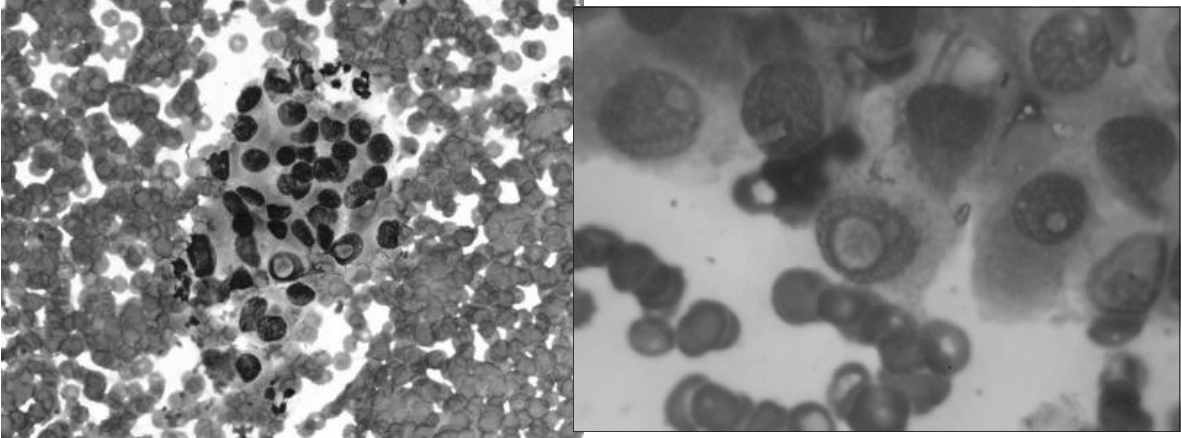
-Papillae ( arrows ) are finger-like projections covered by epithelial cells (the blue dots around the papillae).

-The papillae have fibro-vascular cores ( central region which is fibrous and contains blood vessels (V) )

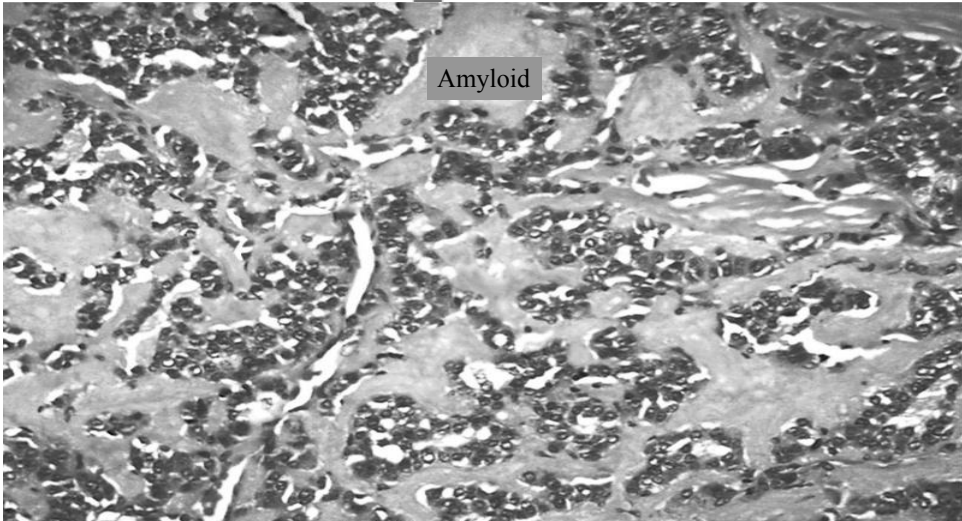
Note: all the red dots in the pic are red blood cells within the vessels.



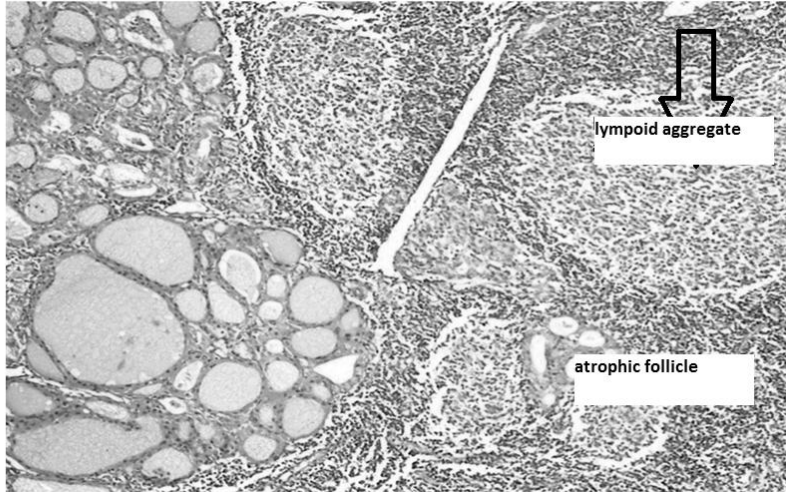
# Inclusions in papillary thyroid carcinoma.



# Medullary carcinoma, note the amyloid.



# Hashimoto thyroiditis: lymphoid follicles and atrophic follicles



Hurthle cells in Hashimoto thyroiditis: large cells with abundant eosinophilic cytoplasm, due to increased mitochondria

