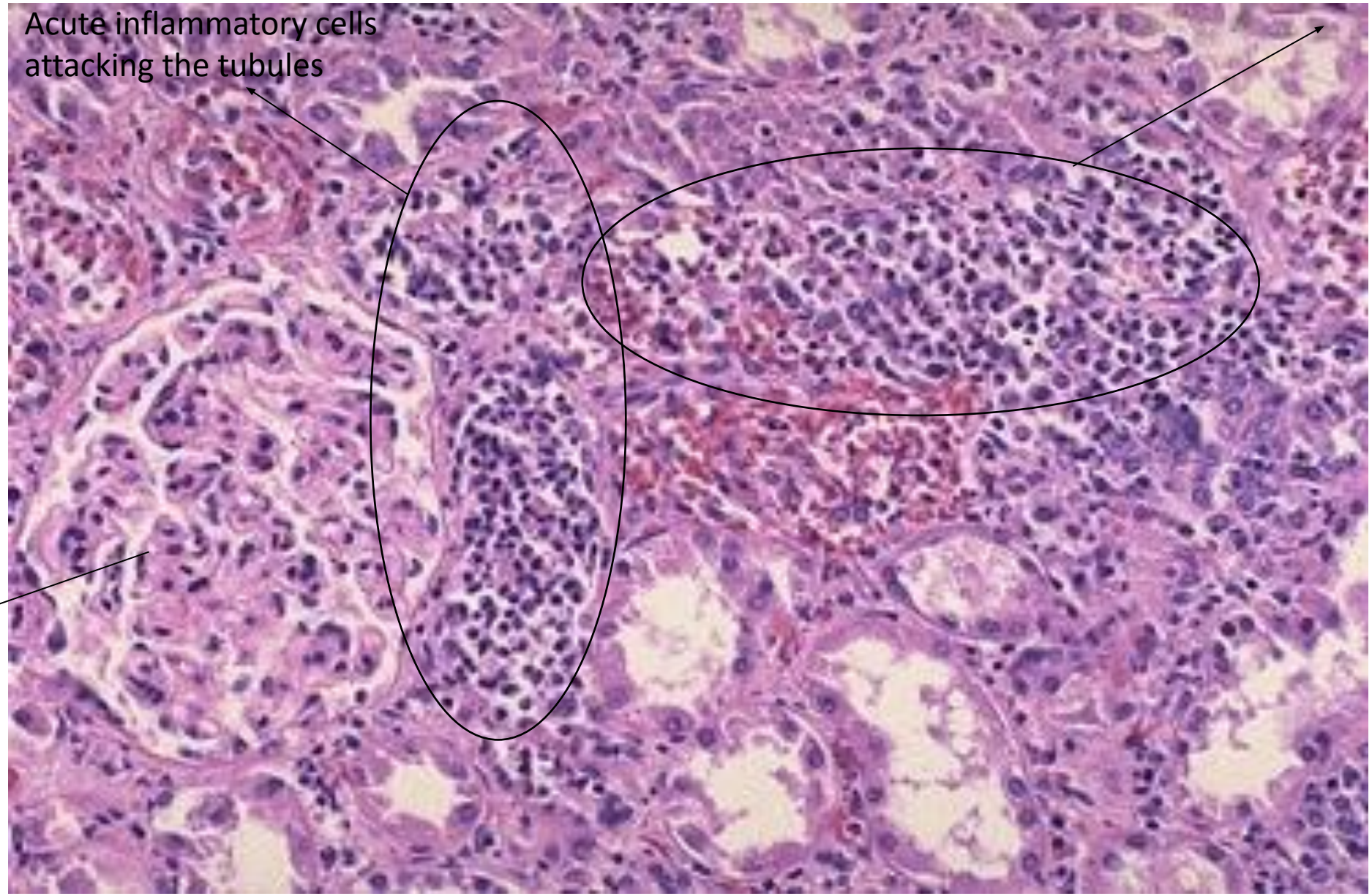
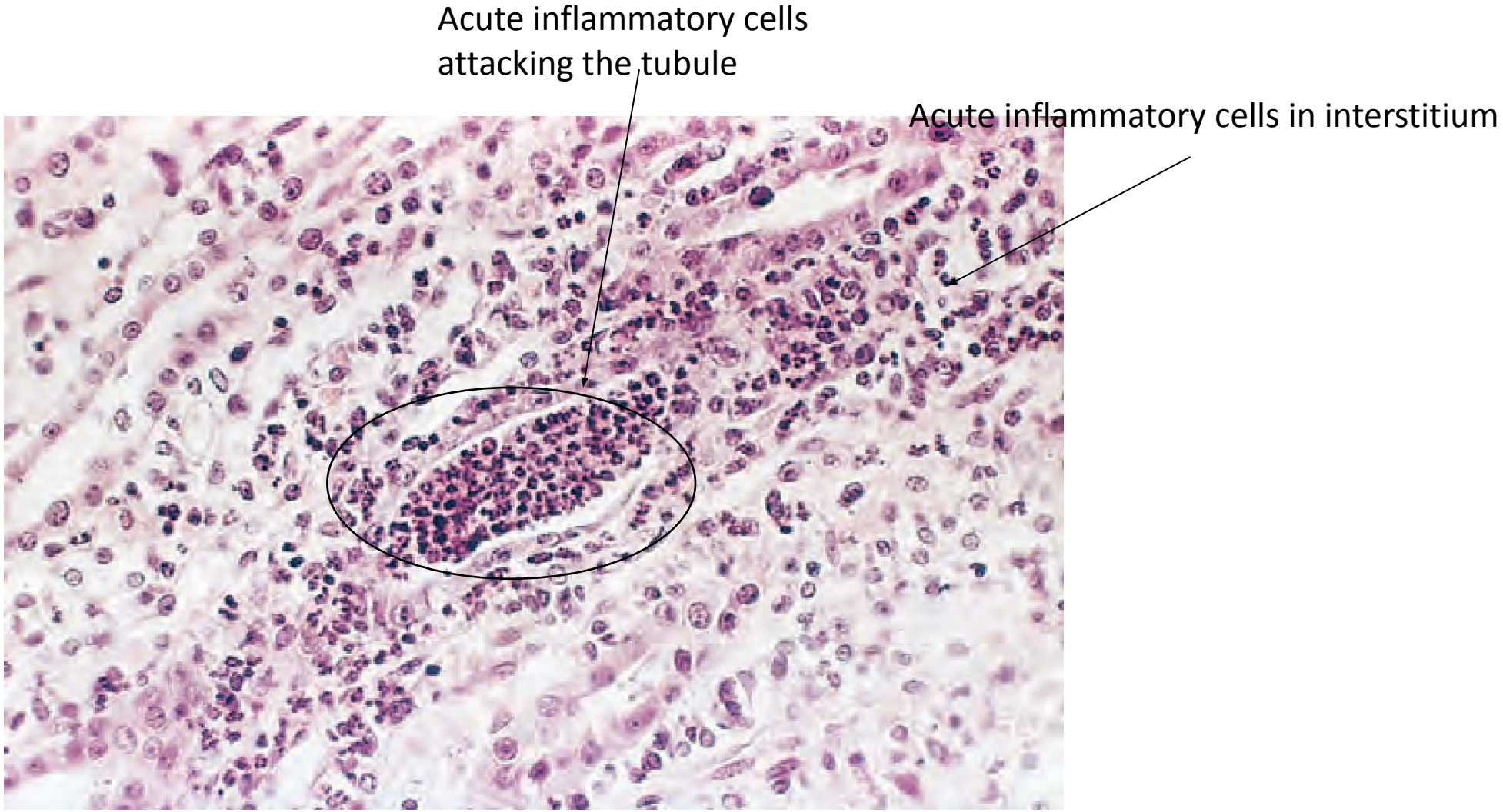
Acute pyelonephritis

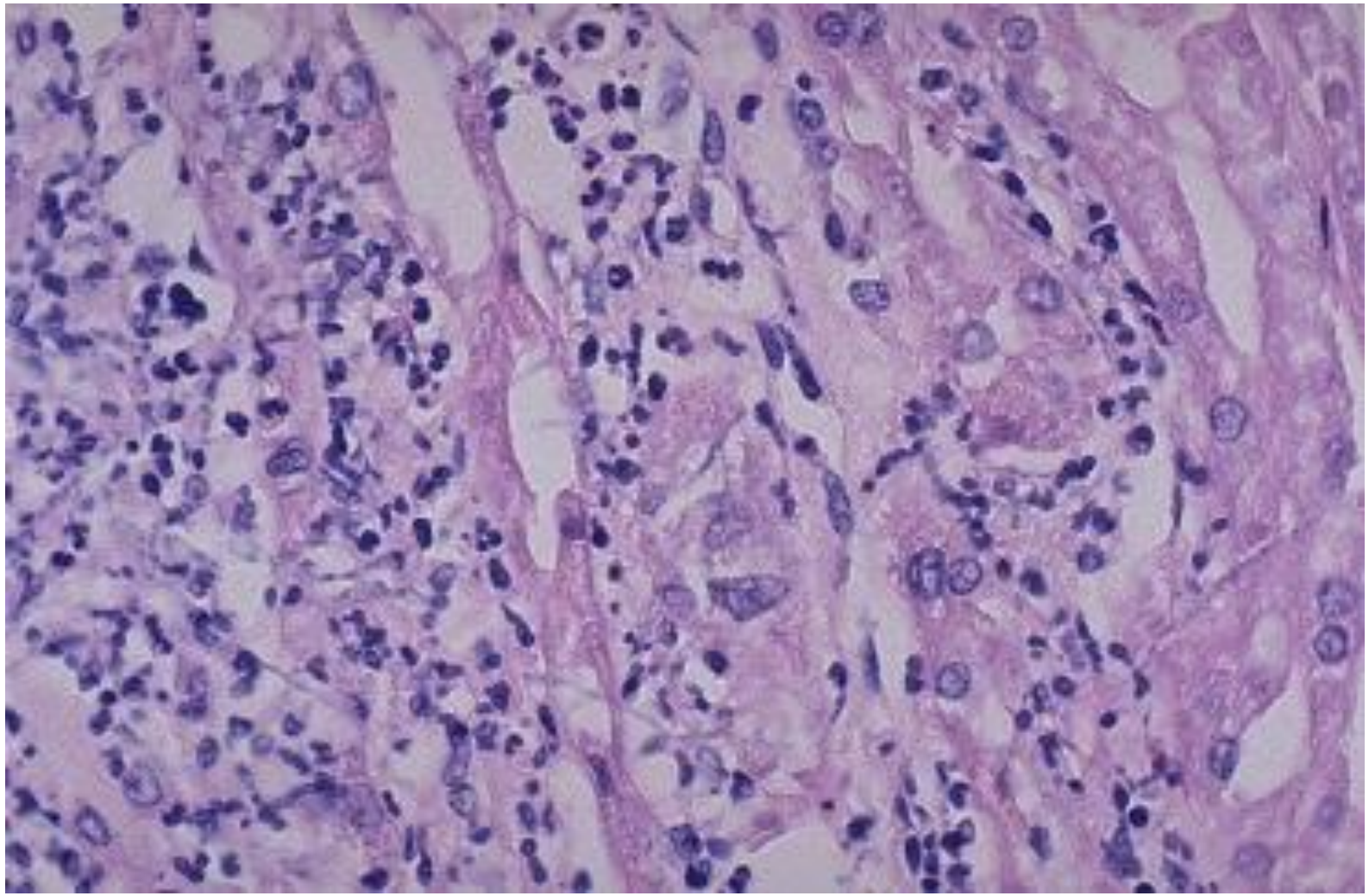


Acute pyelonephritis



Acute pyelonephritis

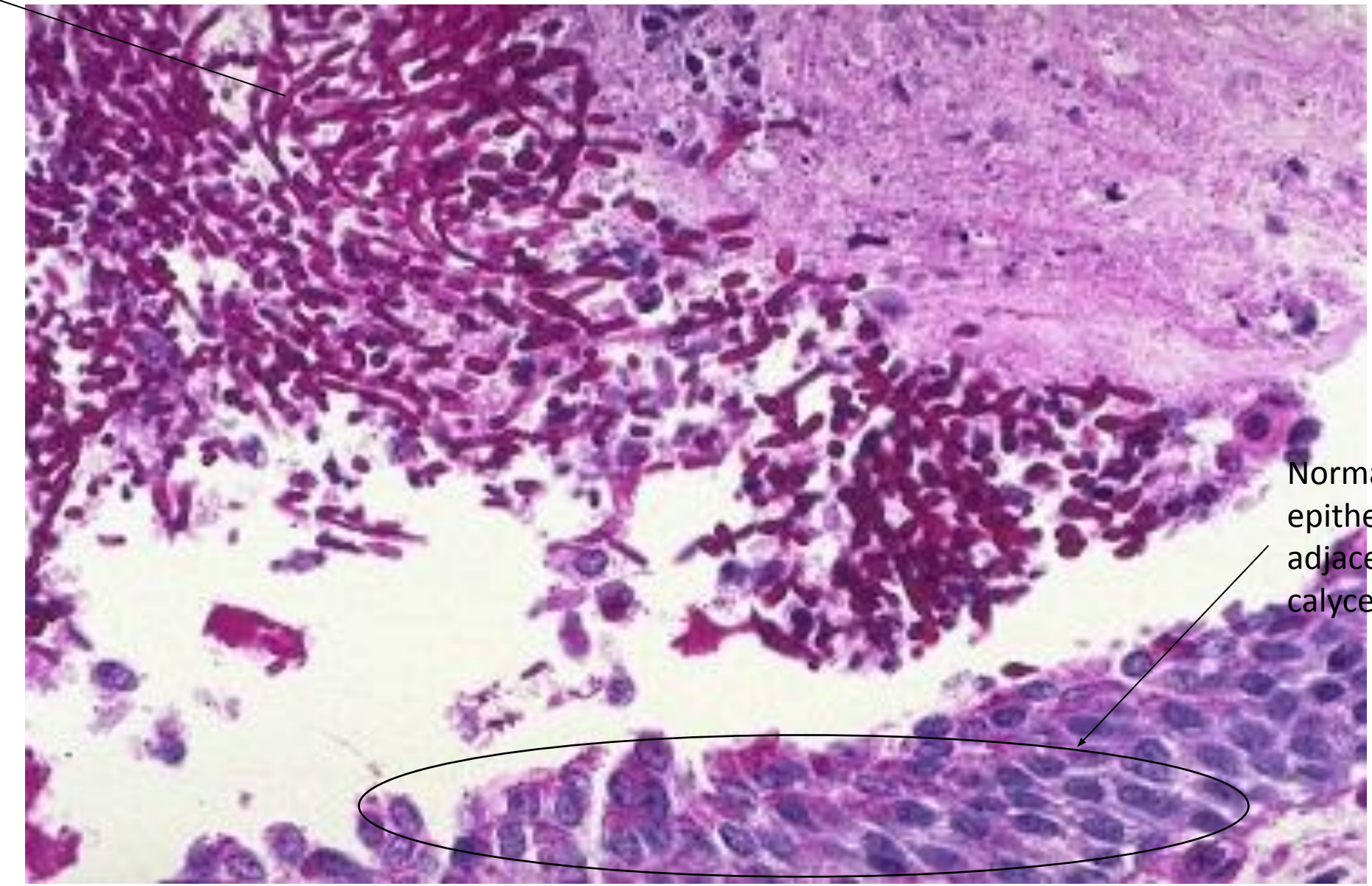
Acute inflammatory cells in interstitium



Necrotizing papillitis (papillary necrosis)…a special pattern of acute pyelonephritis especially in diabetics

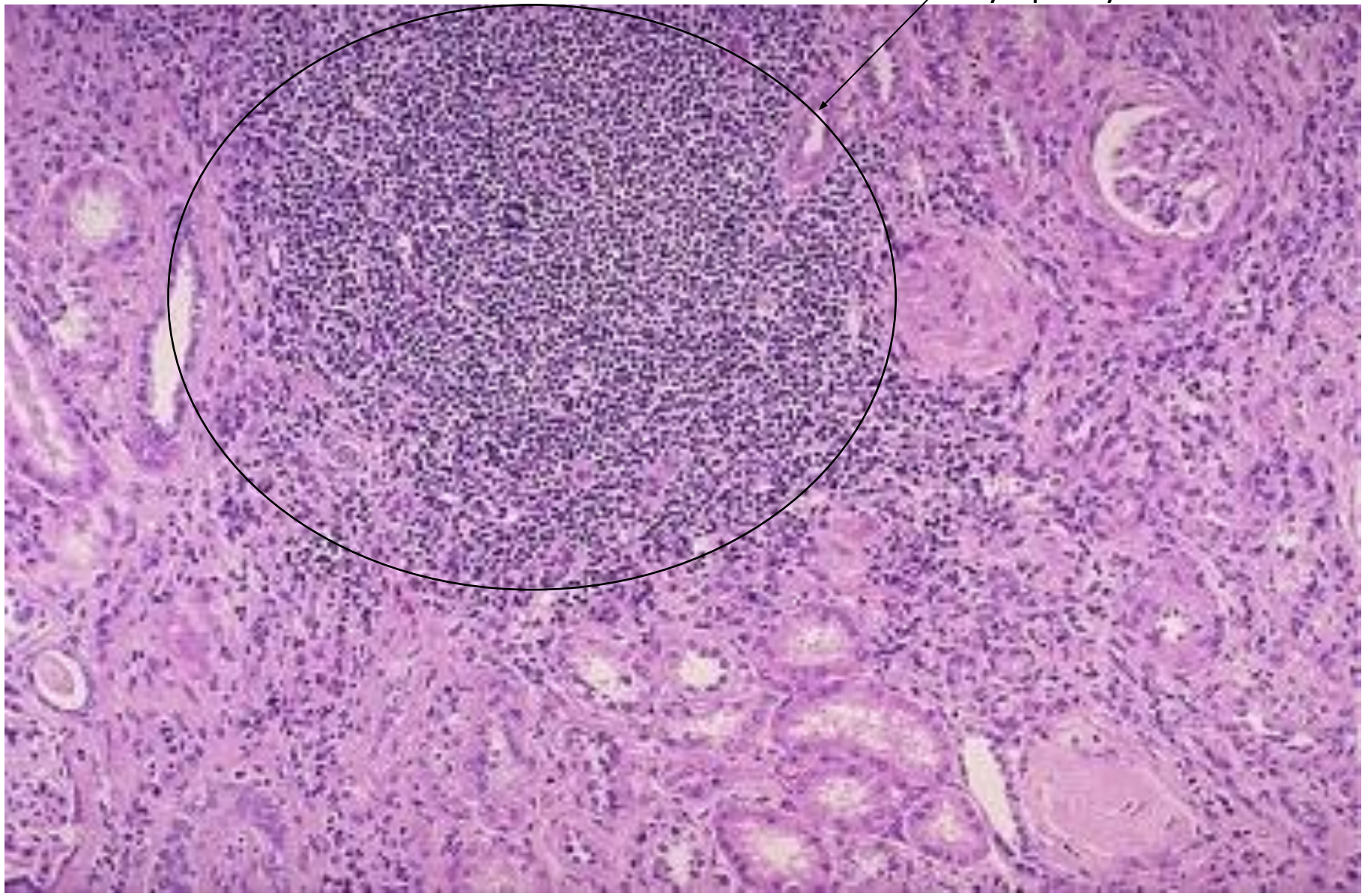
Candida as highlighted by PAS stain

Pyelonephritis due to candida

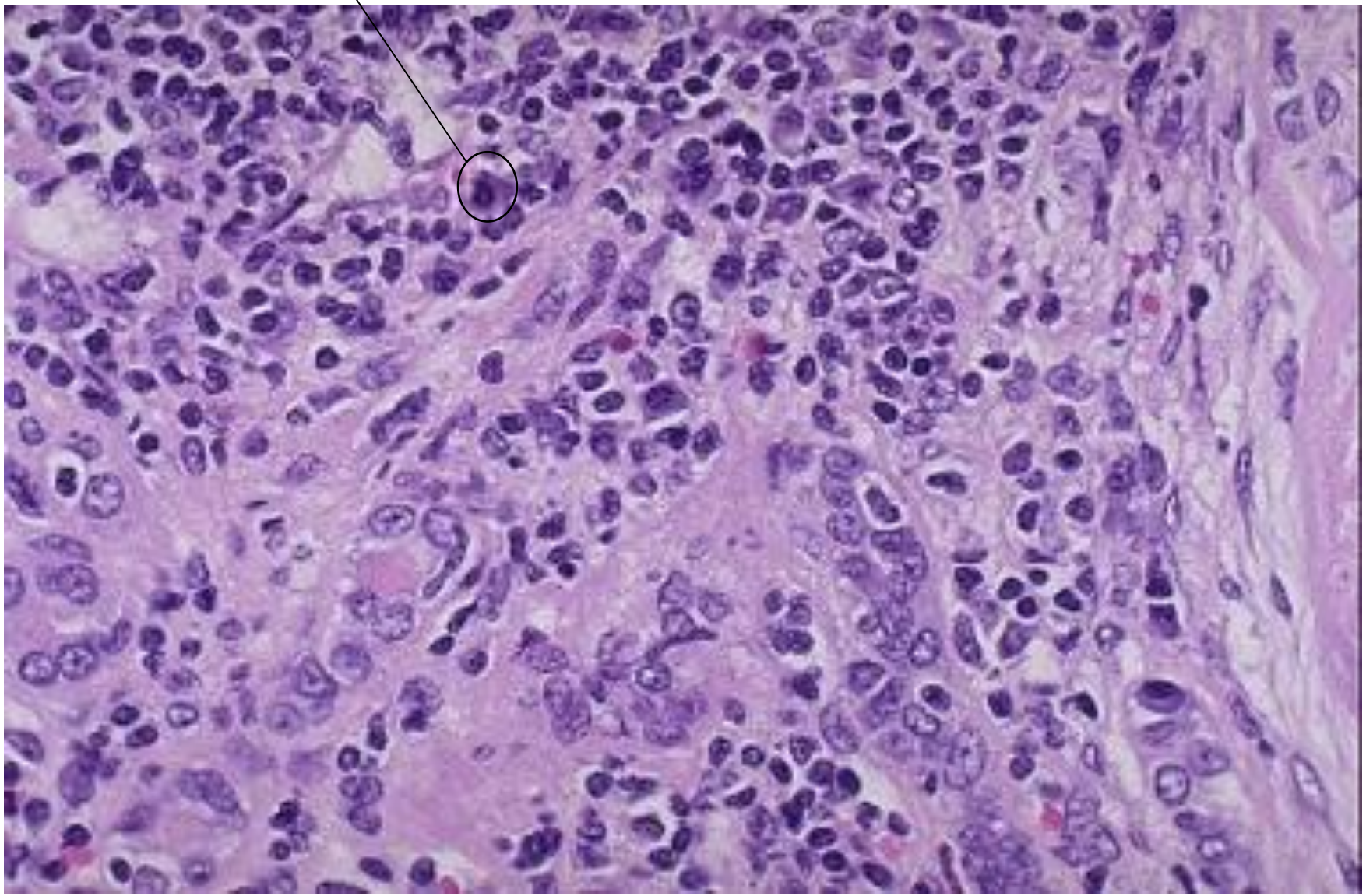


Normal transitional epithelium…from adjacent renal calyces

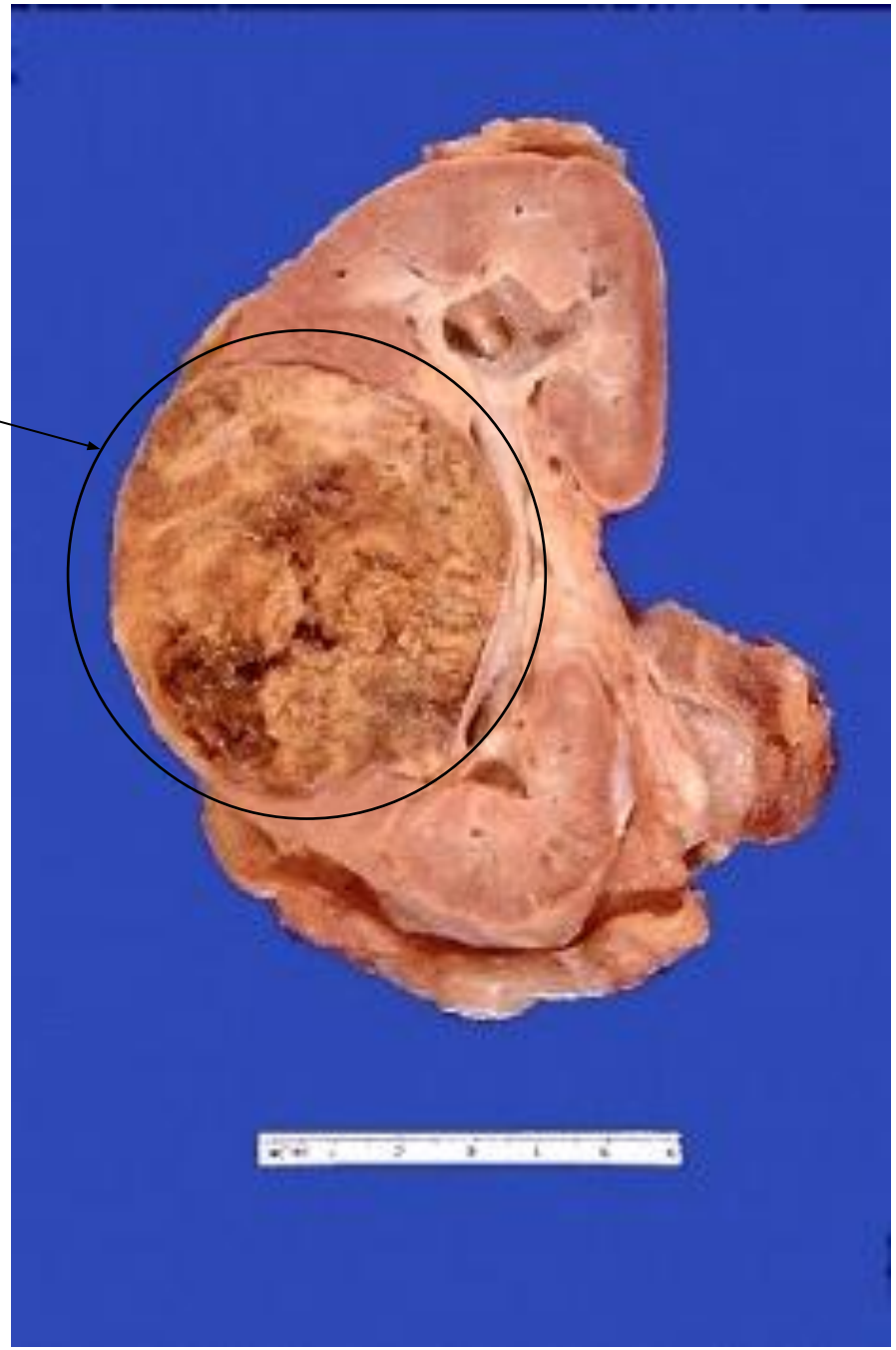
Chronic pyelonephritis (as you see lymphocytes in interstitium)



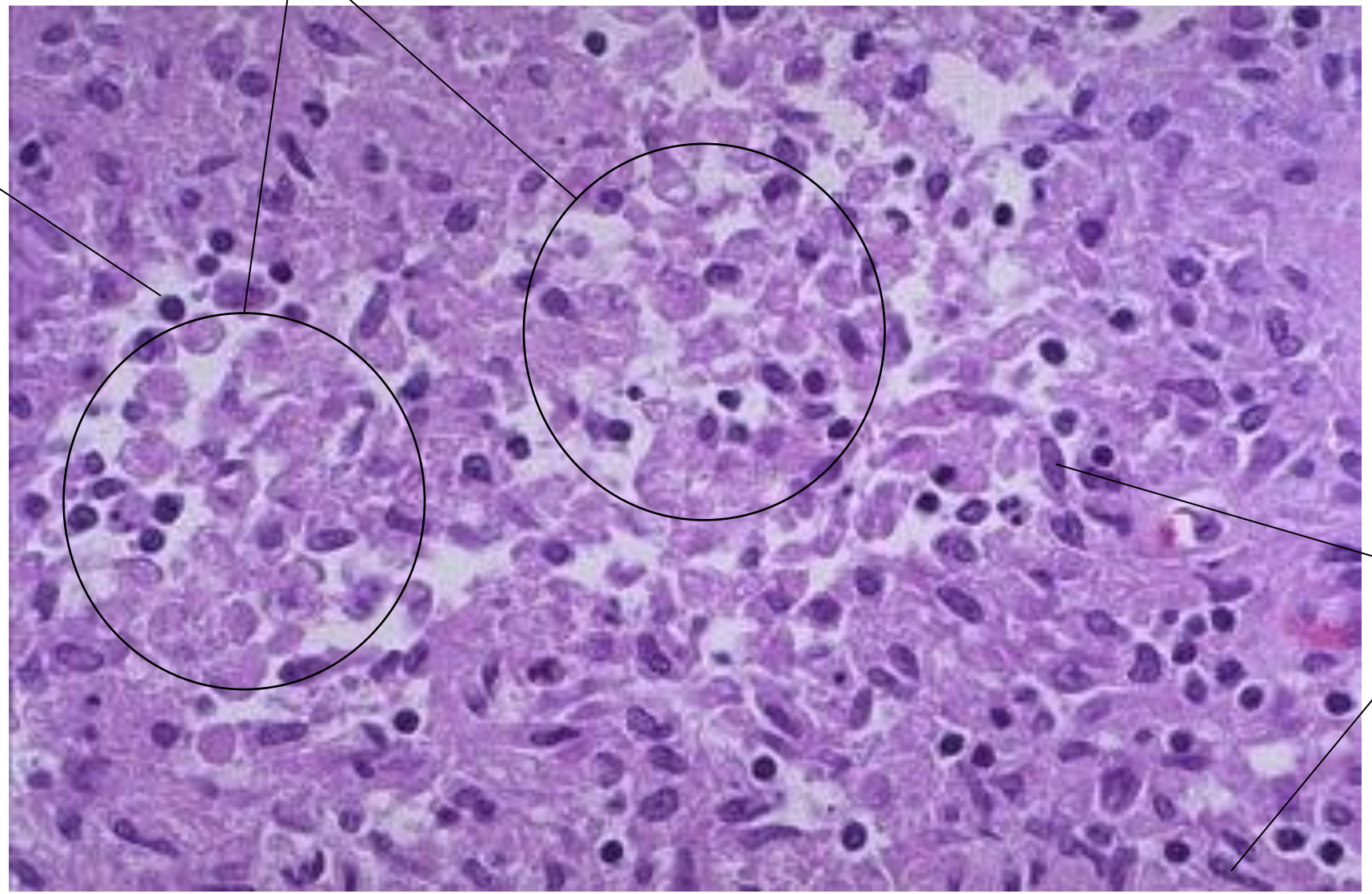
Chronic pyelonephritis (as you see lymphocytes, plasma cells & few eosinophils in interstitium)



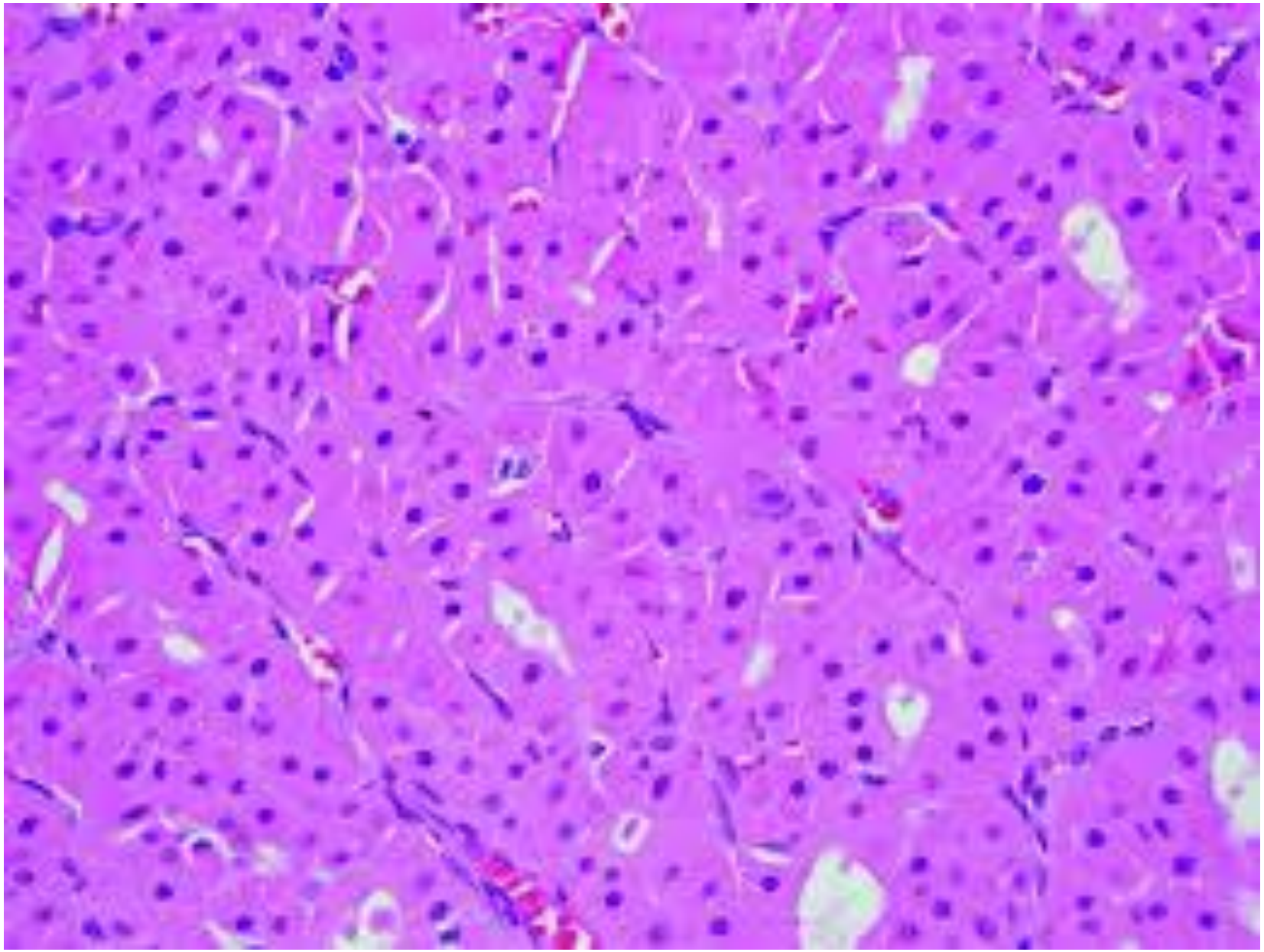
Xanthogranulomatous pyelonephritis (a complication of long standing chronic pyelonephritis)…as you see it may appear as a suspicious mass



Xanthogranulomatous pyelonephritis



Renal oncocytoma..
Bland nuclei and bulky fine granular eosinophilic cytoplasm



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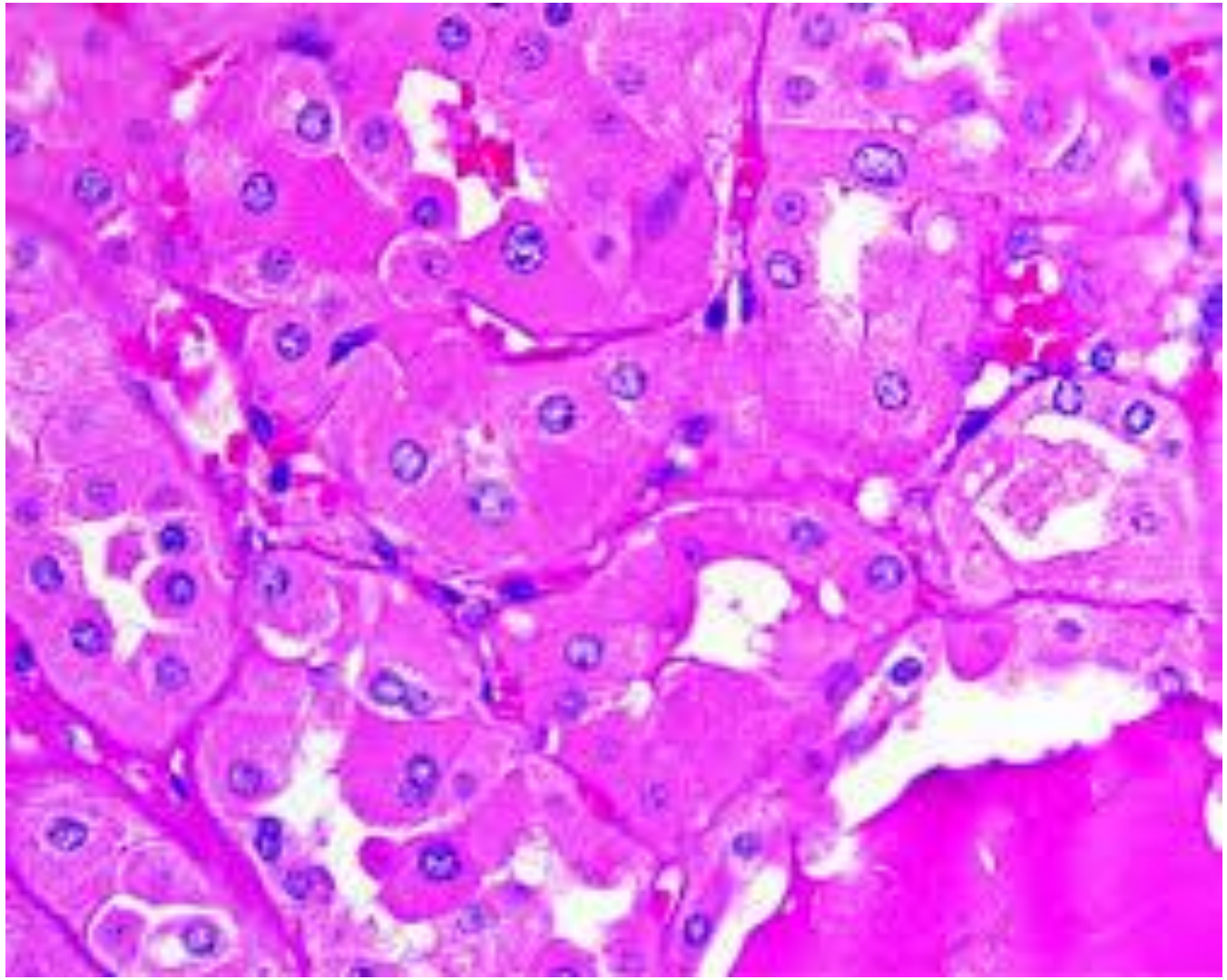

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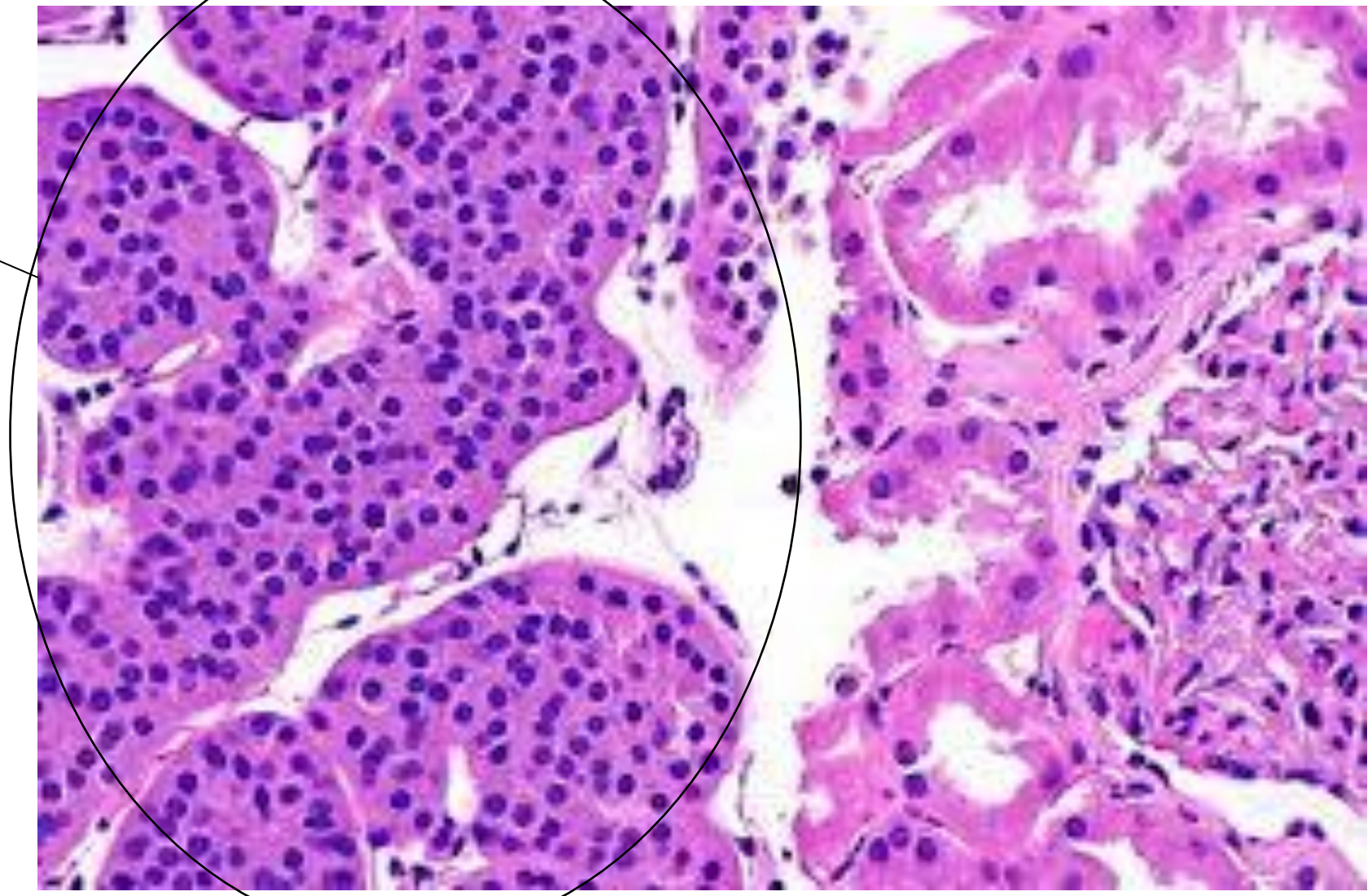
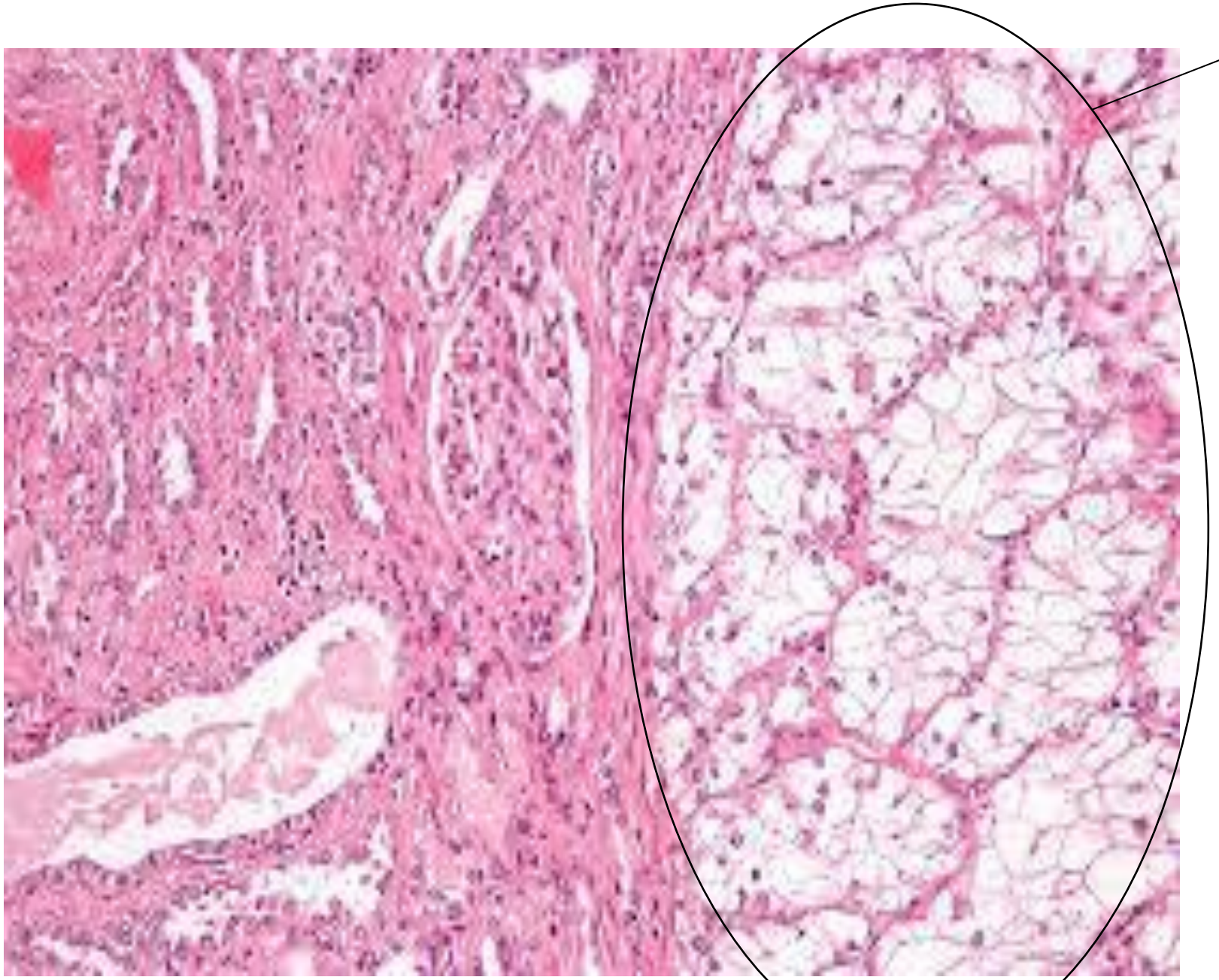
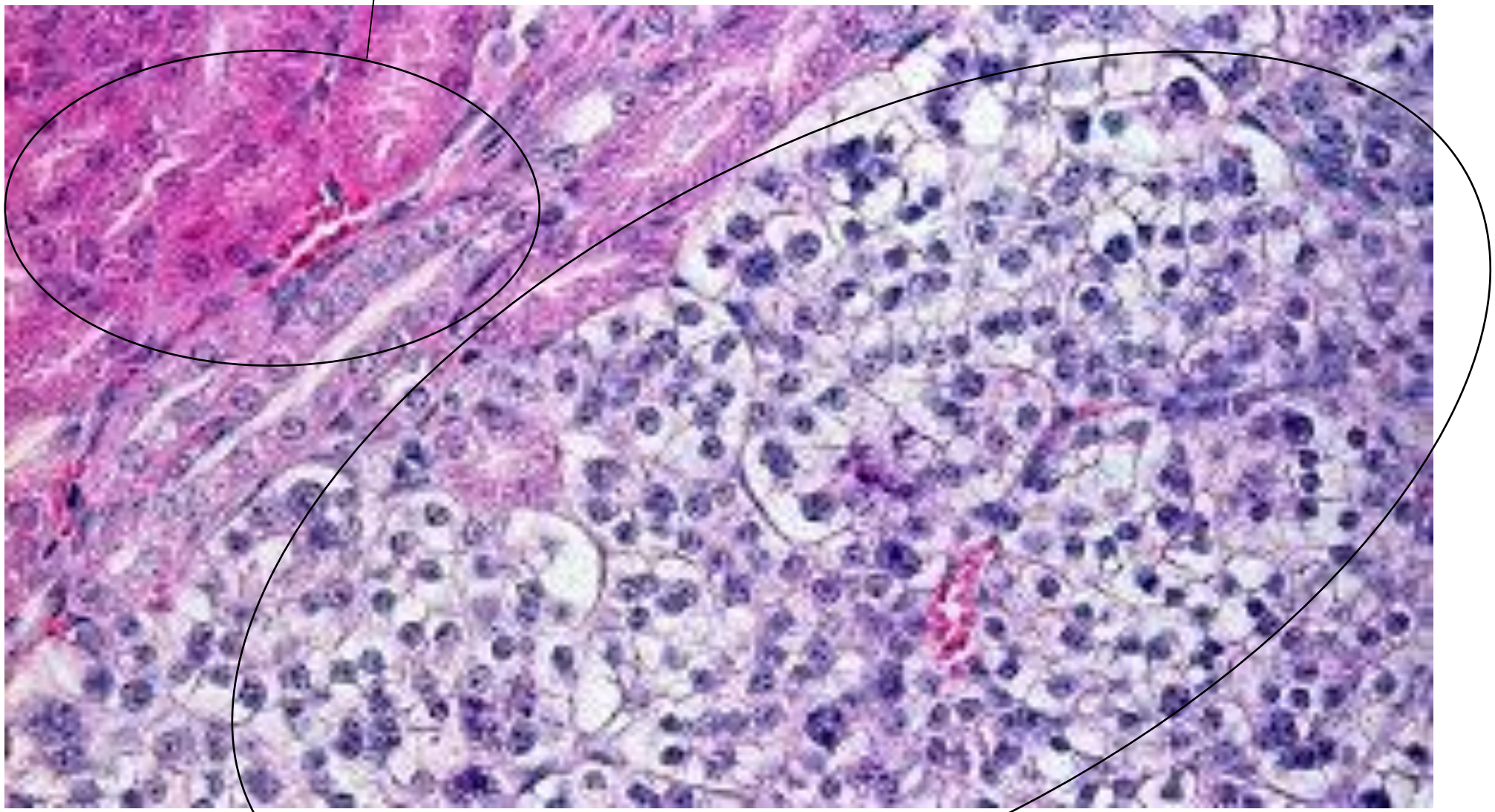


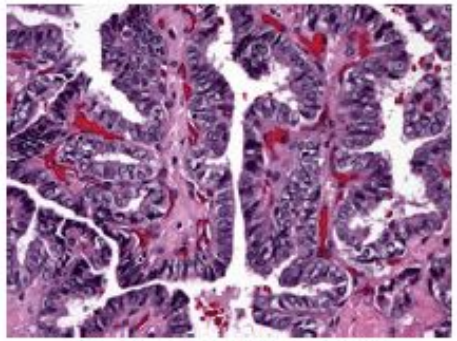


Clear cell renal cell carcinoma
…clear cytoplasm due to fat & glycogen
…the nuclei in this example are low grade (we have Fuhrman grading for renal cell carcinoma especially used for clear cell and papillary types)

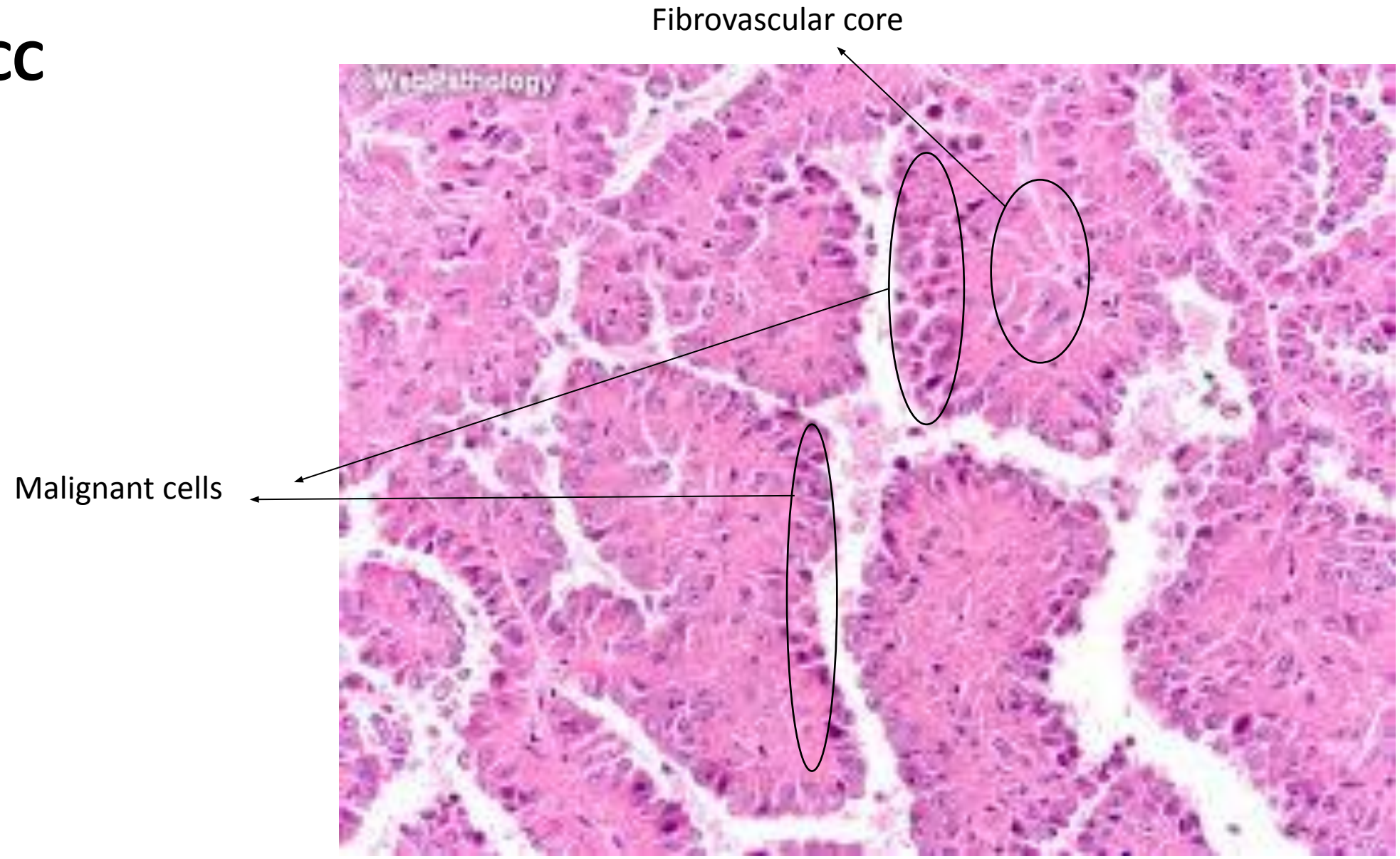
Adjacent normal tubules

Clear cell renal cell carcinoma
..higher grade than the previous example

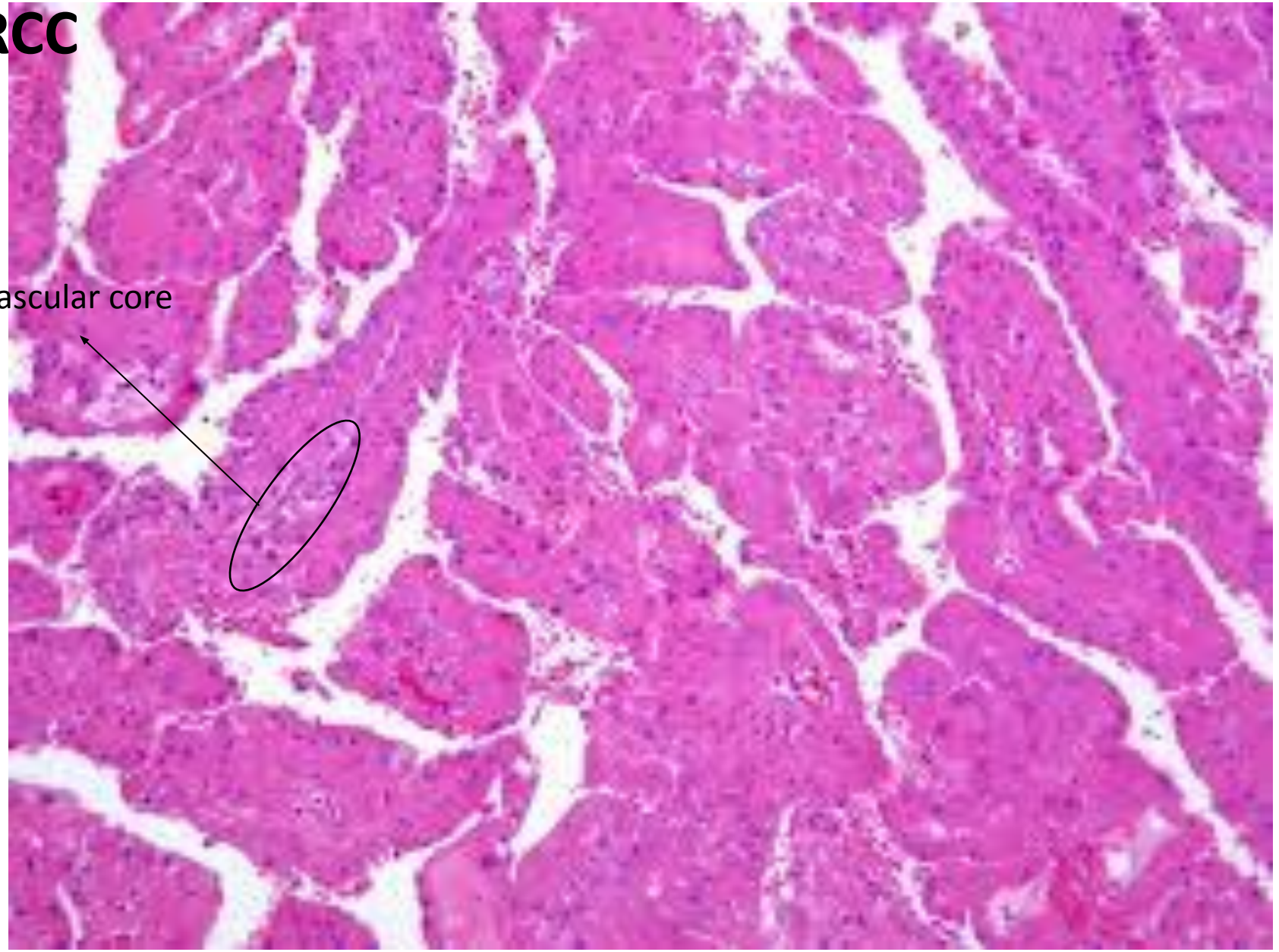


Papillary	fronds of finger-like projections containing fibrovascular cores (stroma with blood vessels) that support the overlying epithelium. If papillary structures grow endophytically, the process is called "inverted" (as in inverted papilloma of the bladder or sinuses) Etymology: papilla = *nipple* (Latin), or nipple-like protrusion.  FV core = Stroma + Vessels	 papillary thyroid carcinoma

Papillary RCC

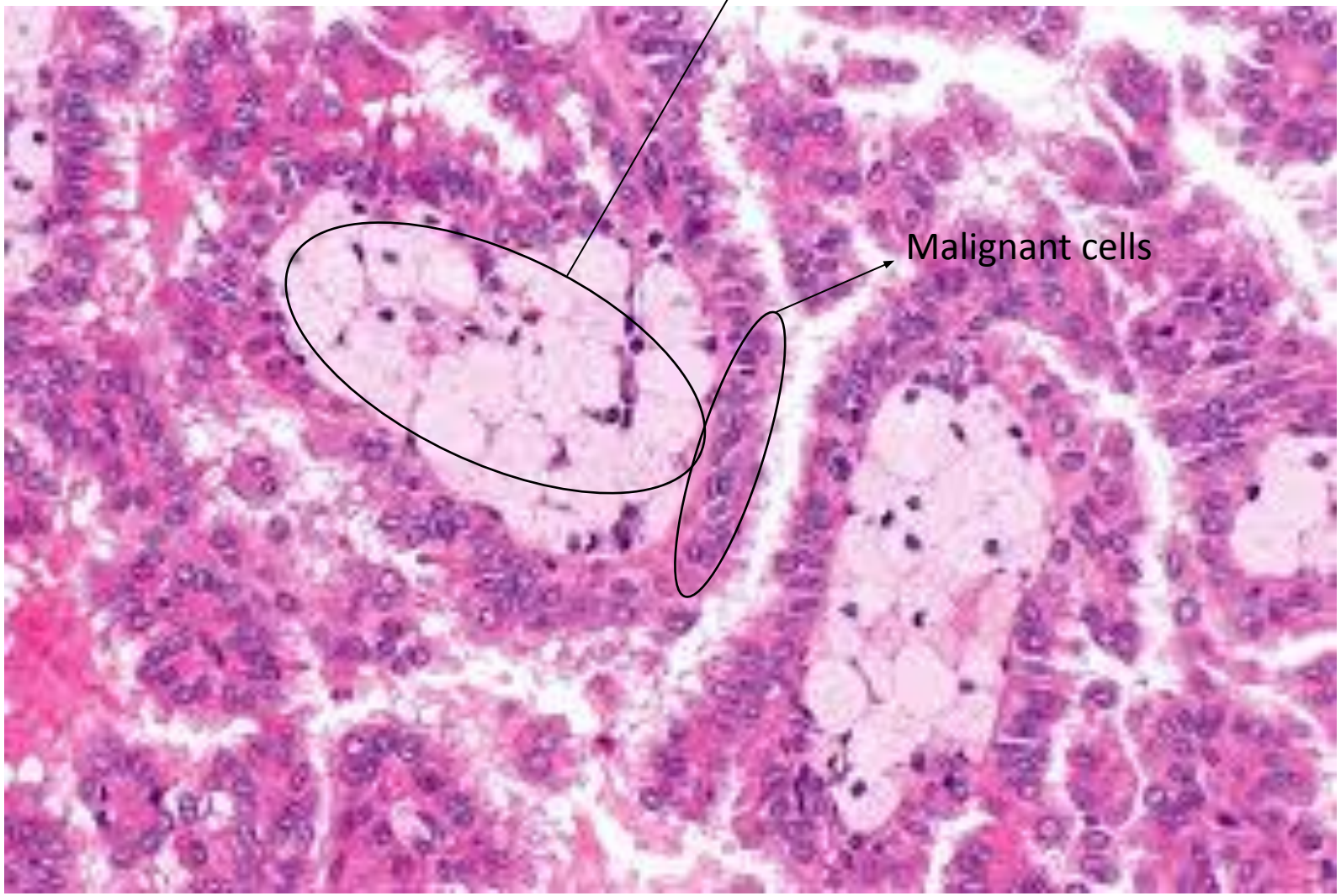


Papillary RCC

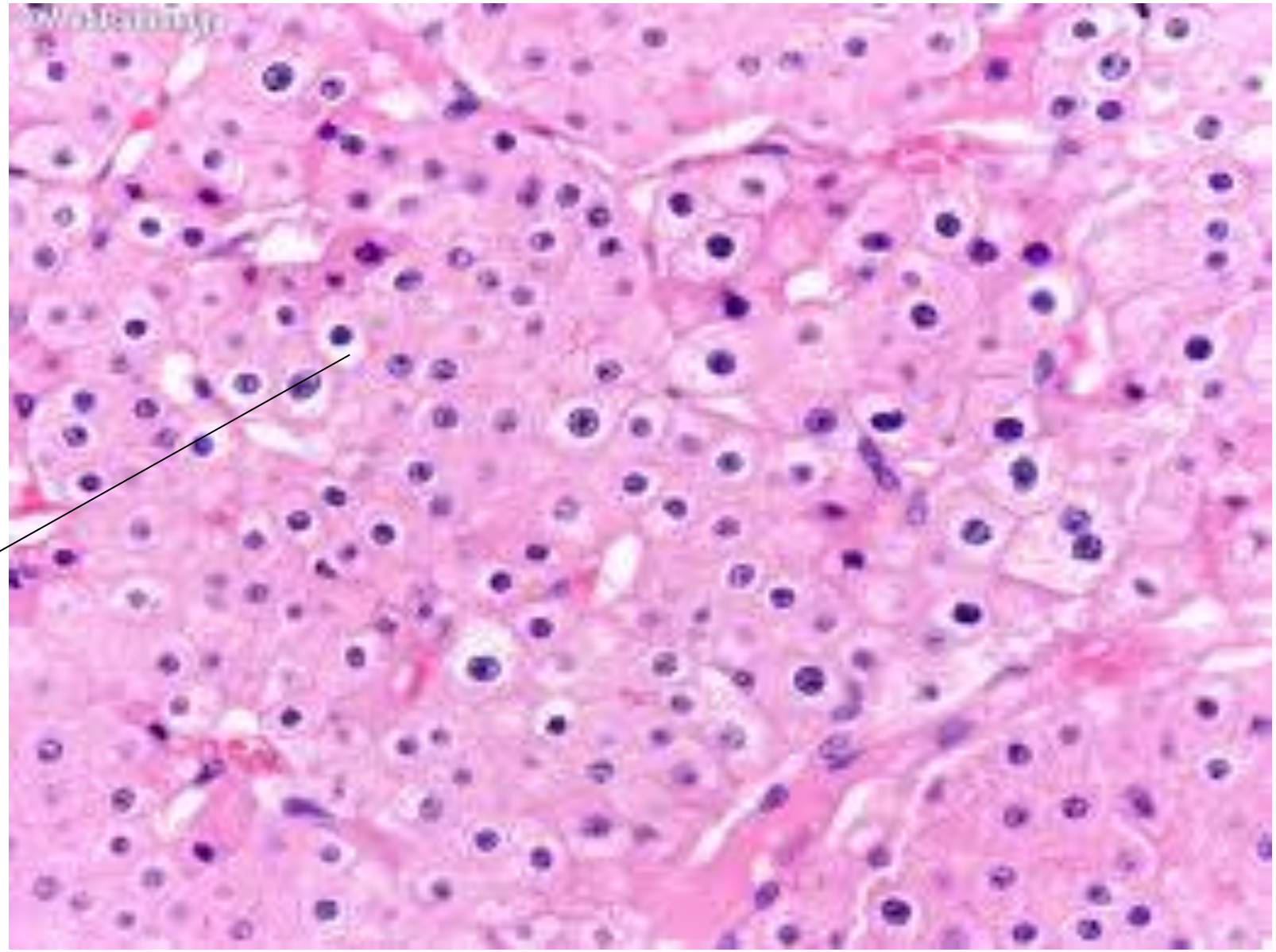


Papillary RCC

The core here is filled with foamy macrophages and this is common to occur in papillary RCC

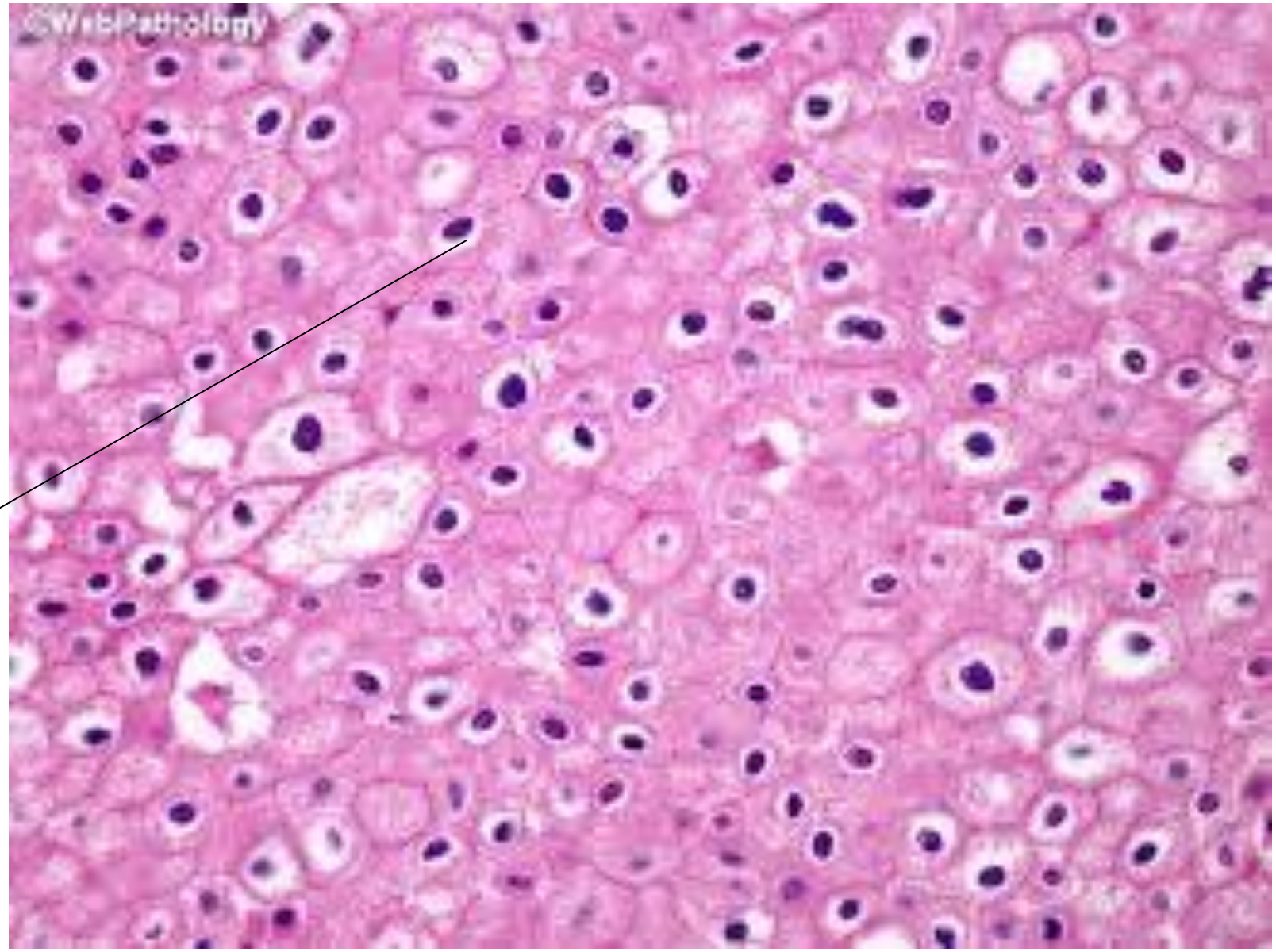


Chromophobe RCC



Perinuclear halo is characteristic .. …the nuclei are atypical (hyperchromatic with irregular nuclear contours)

Chromophobe RCC

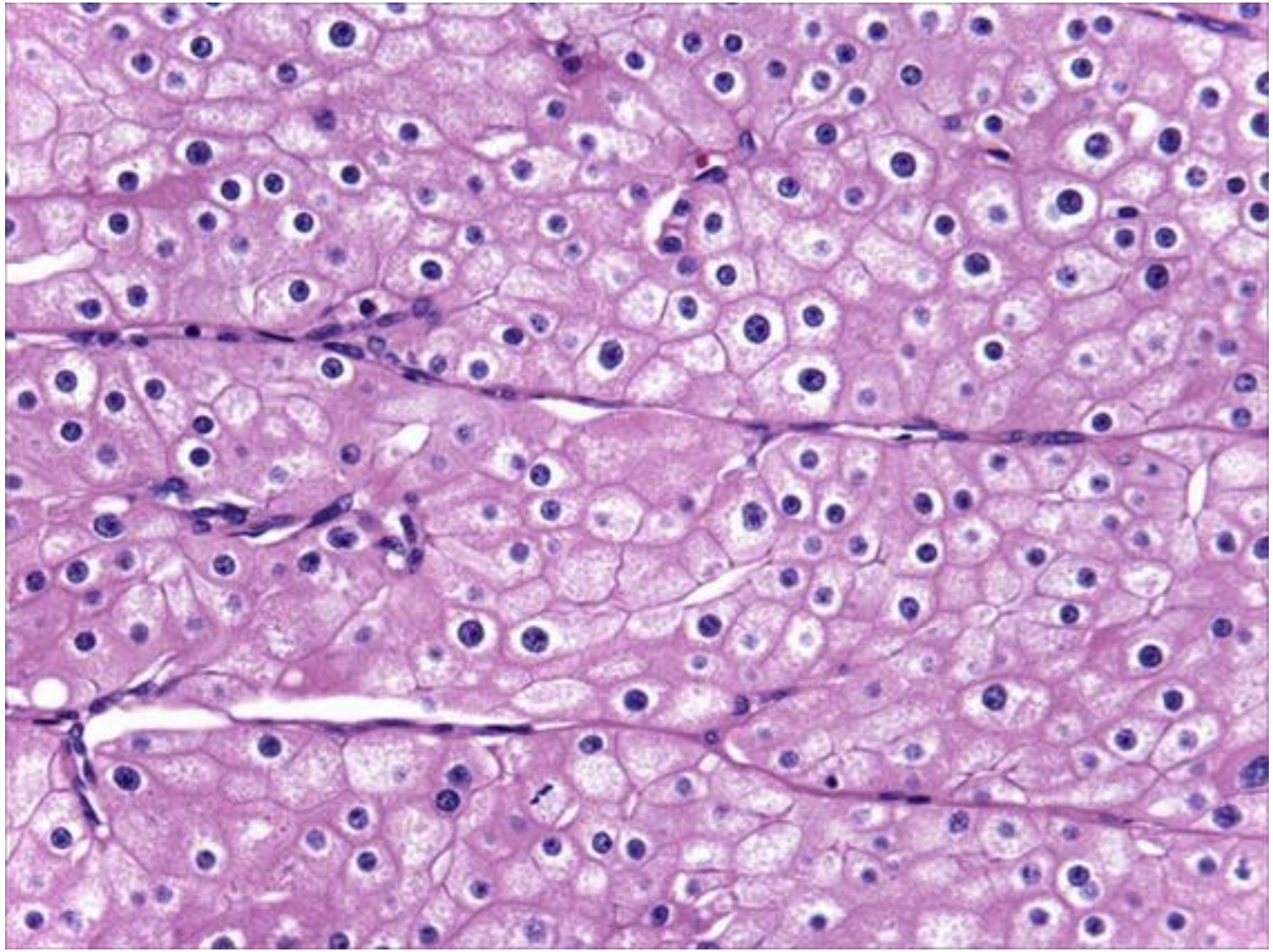


Perinuclear halo is characteristic

…the nuclei are atypical (hyperchromatic with irregular nuclear contours)

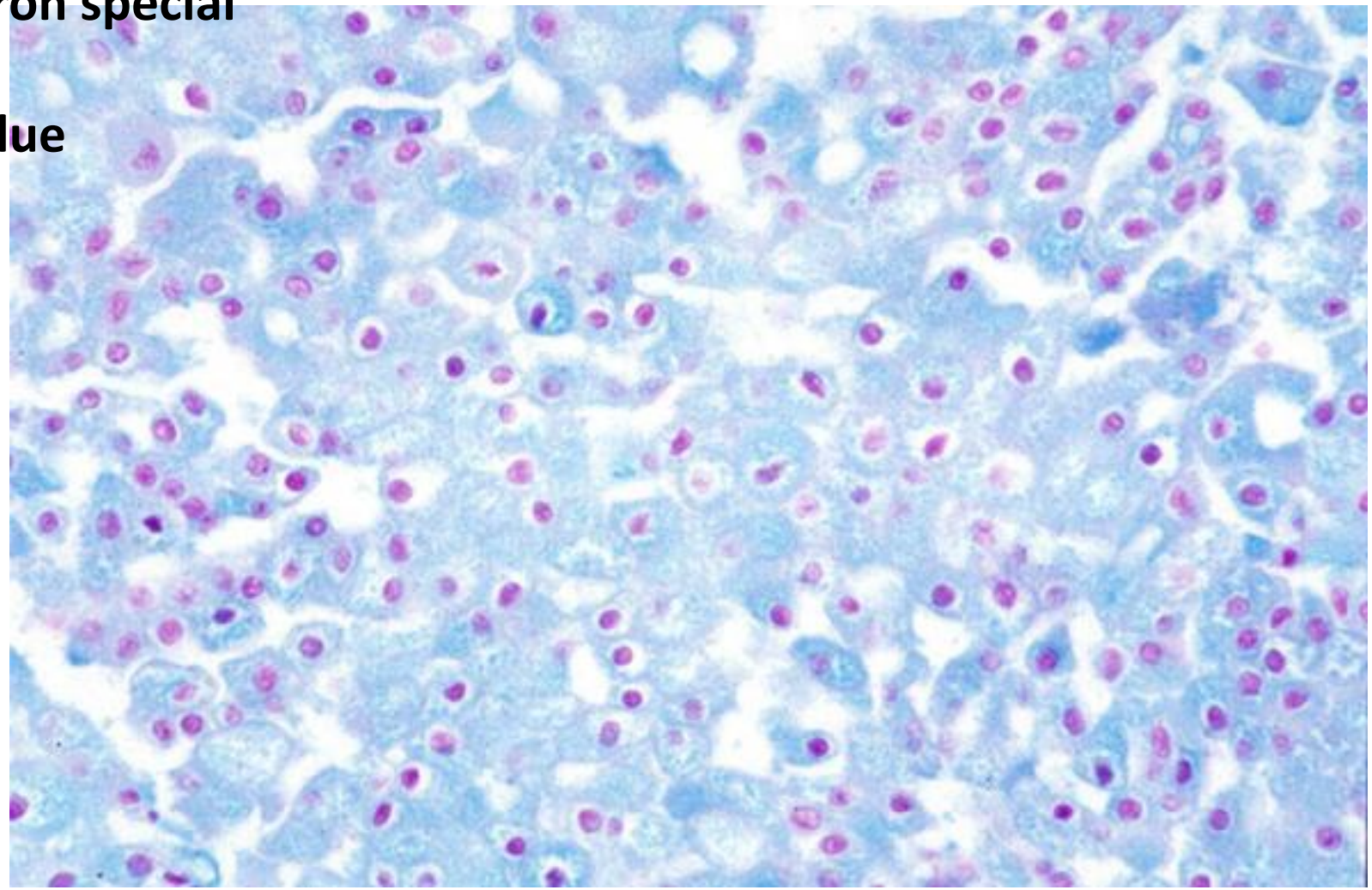
Same notes as
The previous 2
examples

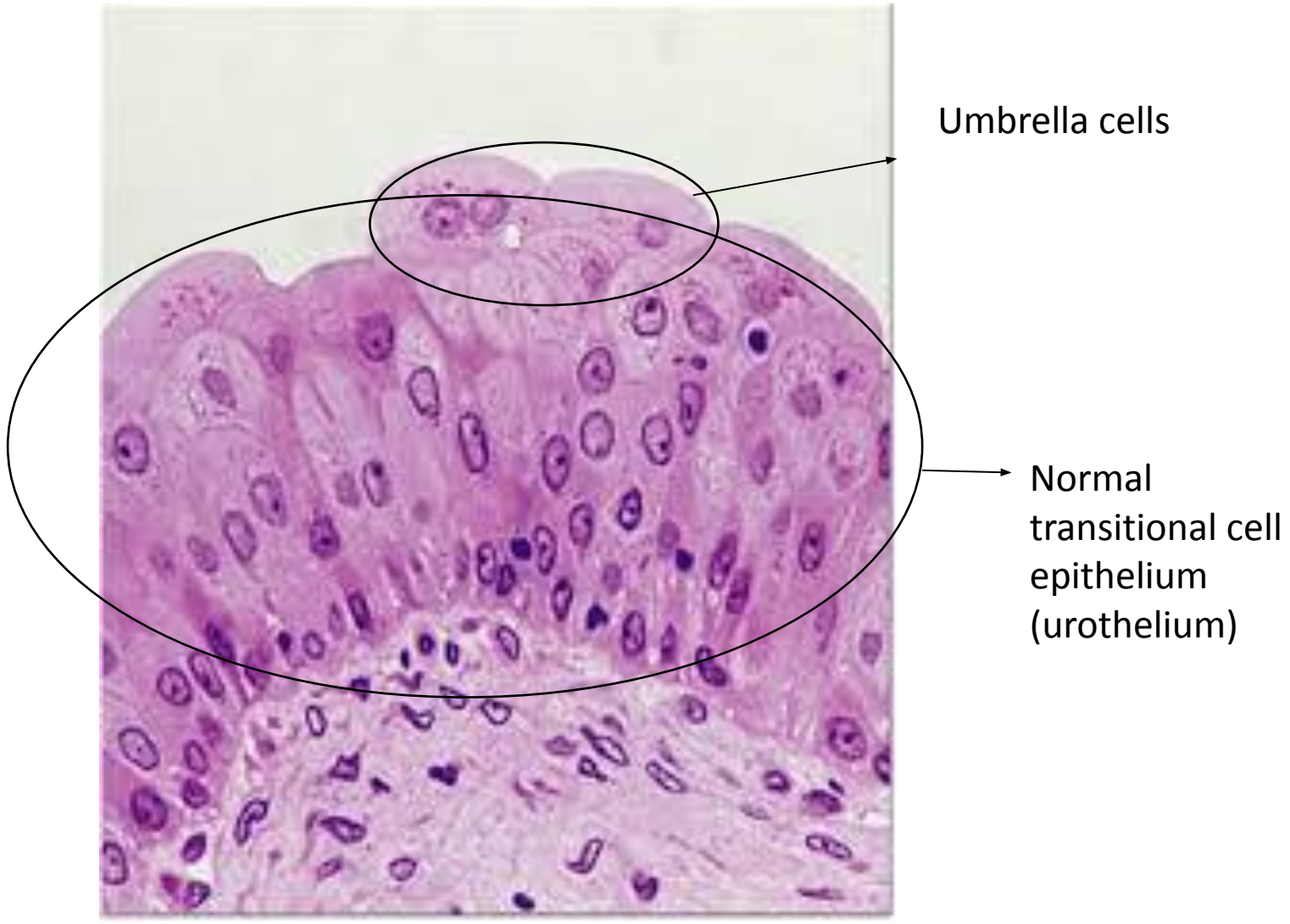
Chromophobe RCC



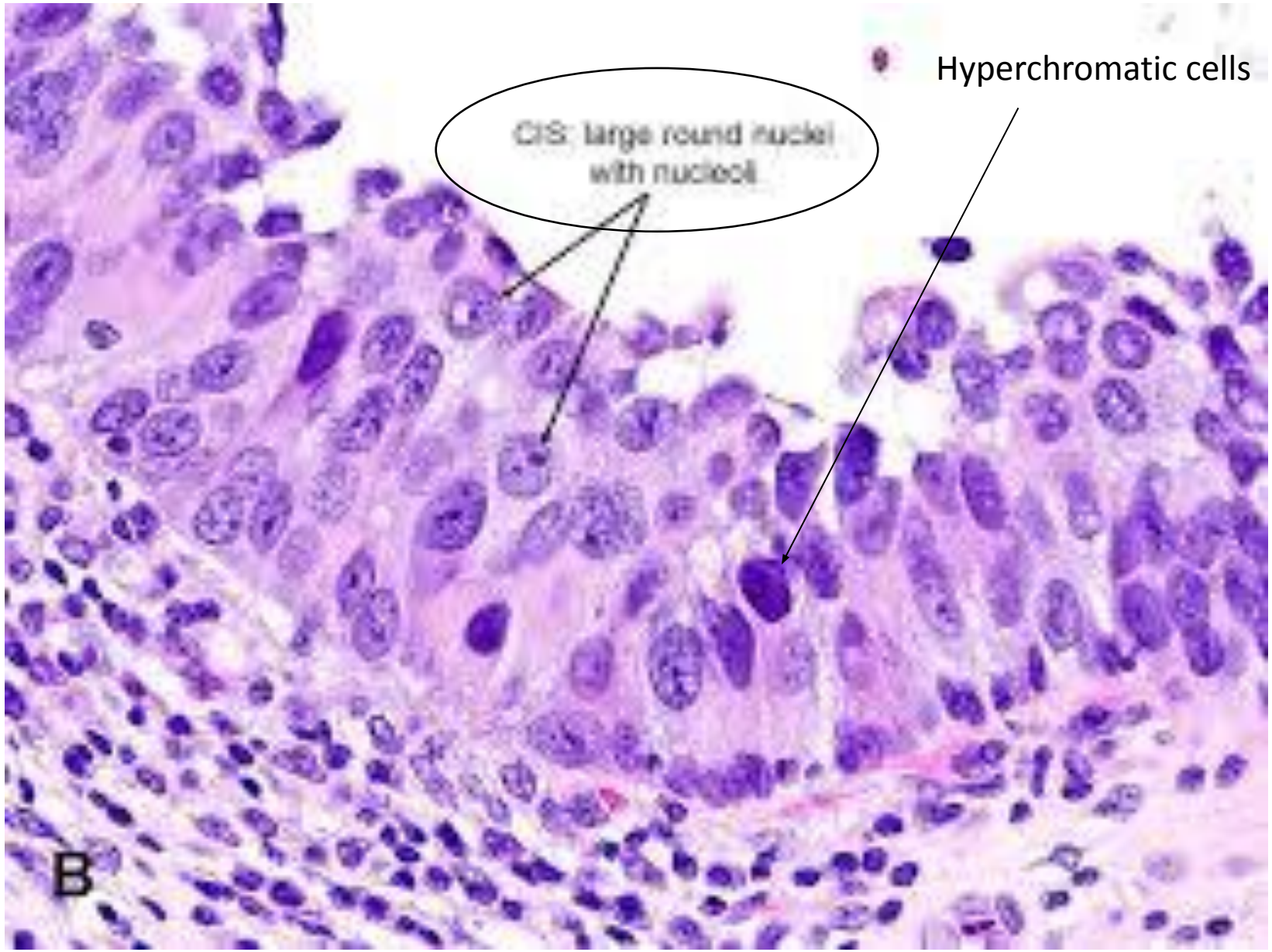
Chromophobe RCC

Hale’s colloidal iron special stain..
It stains mucin blue




Umbrella cells
Normal transitional cell epithelium (urothelium)

Urothelial carcinoma in situ: enlarged nuclei, pleomorphism, hyperchromasia, prominent nucleoli & mitoses…
Cells with these features are seen in the urothelium without BM disruption



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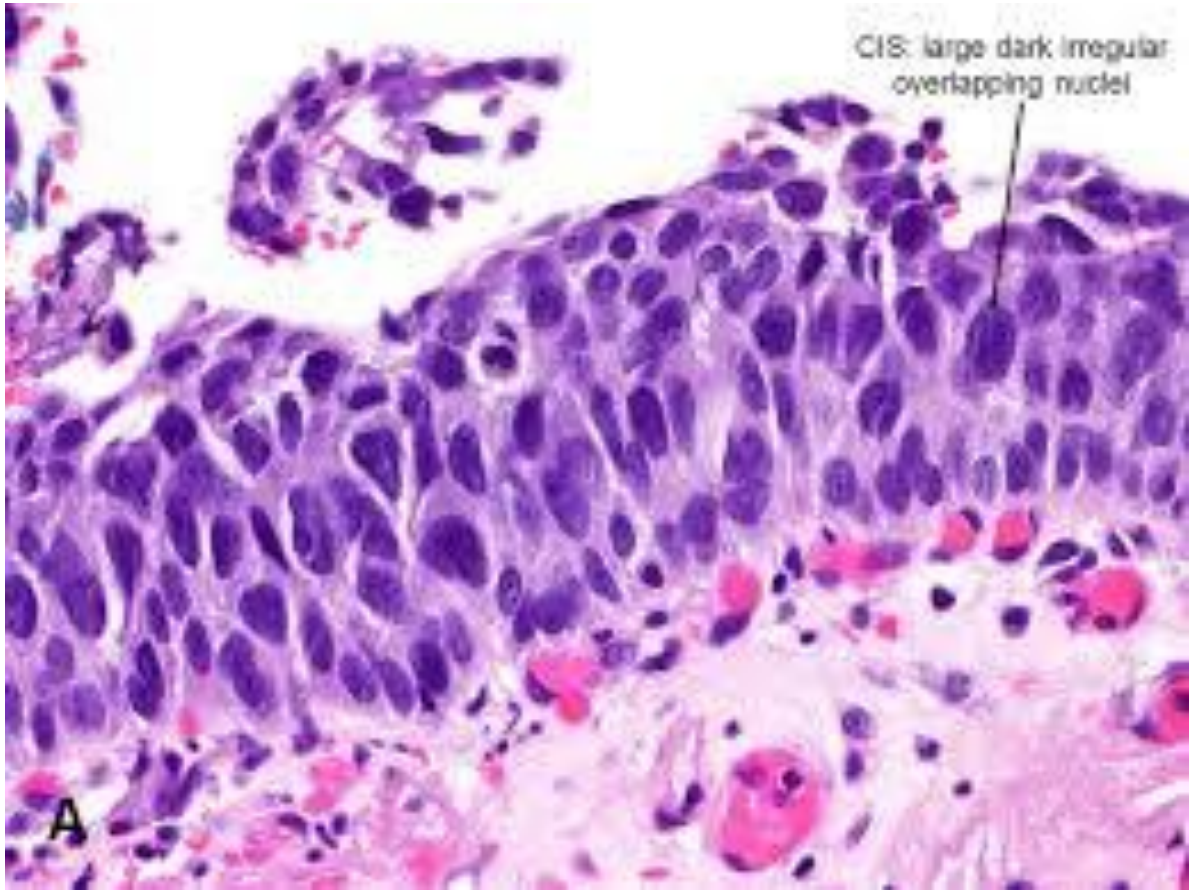

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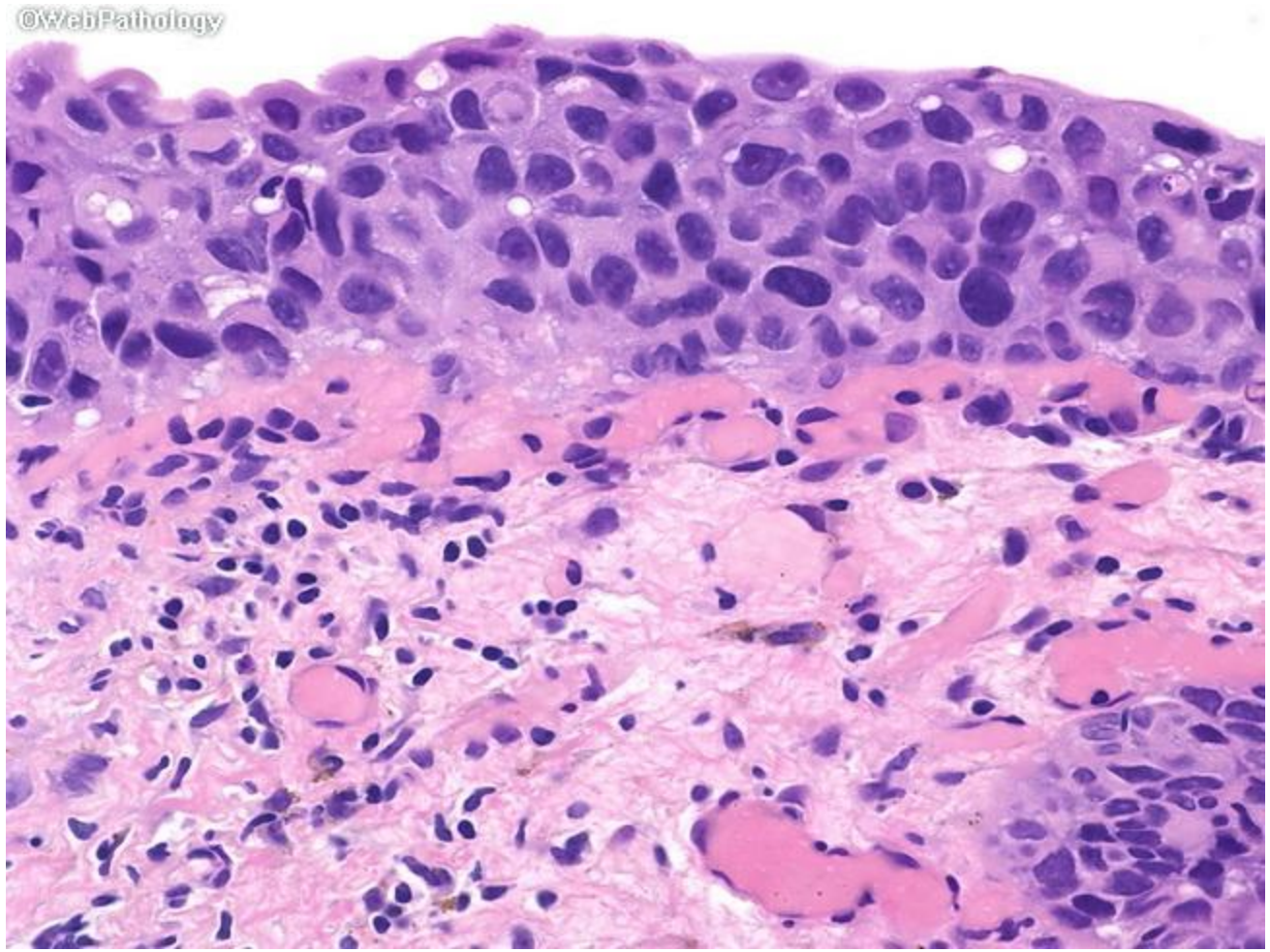
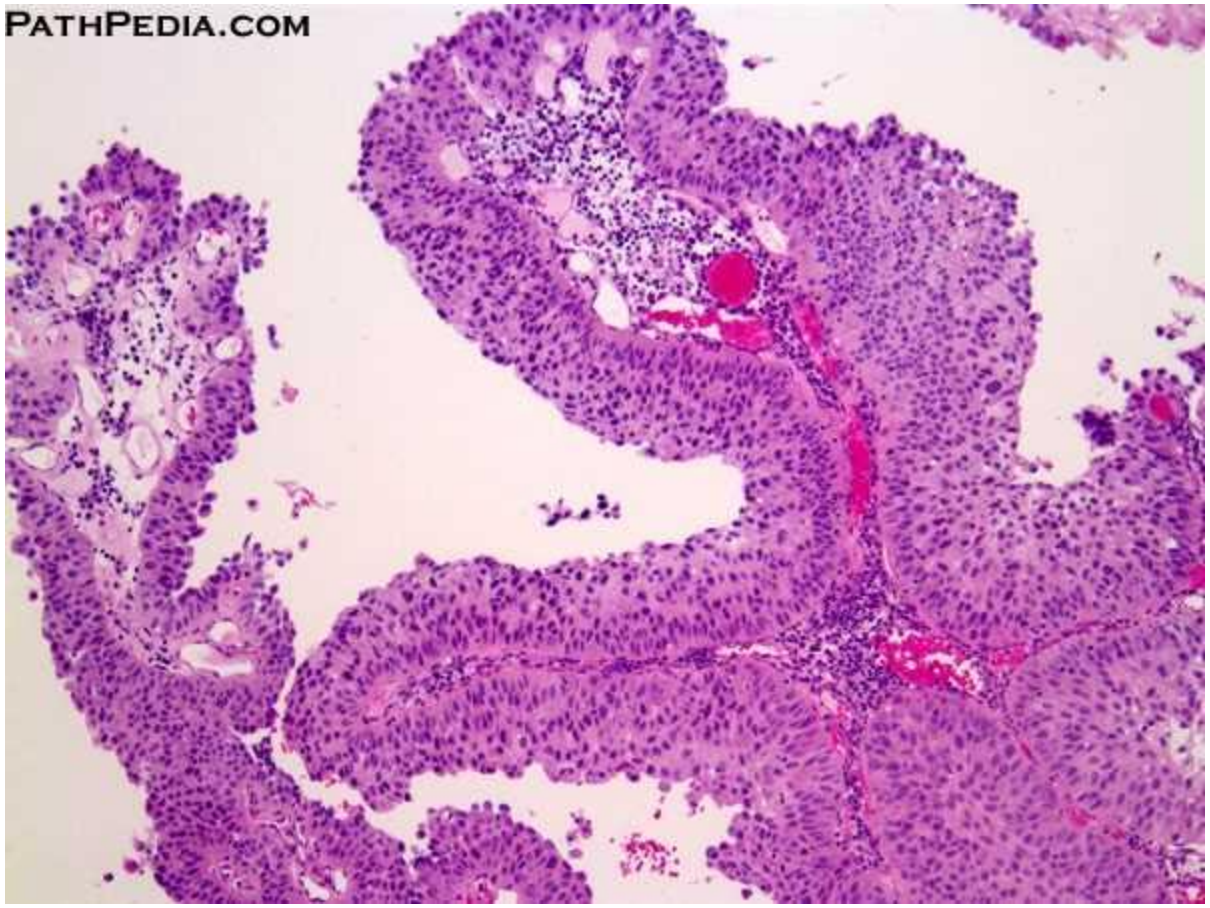
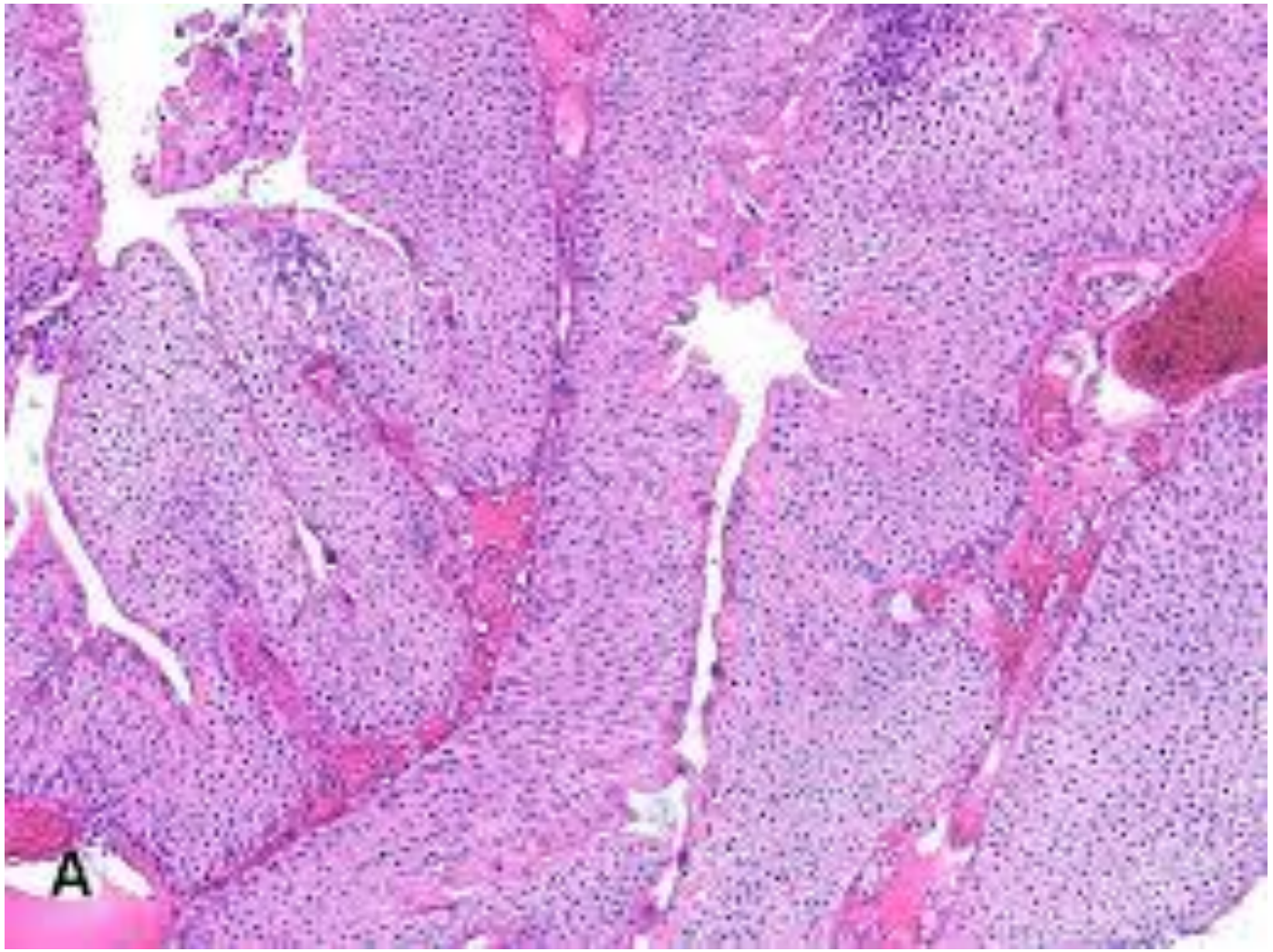


Papillary urothelial carcinoma

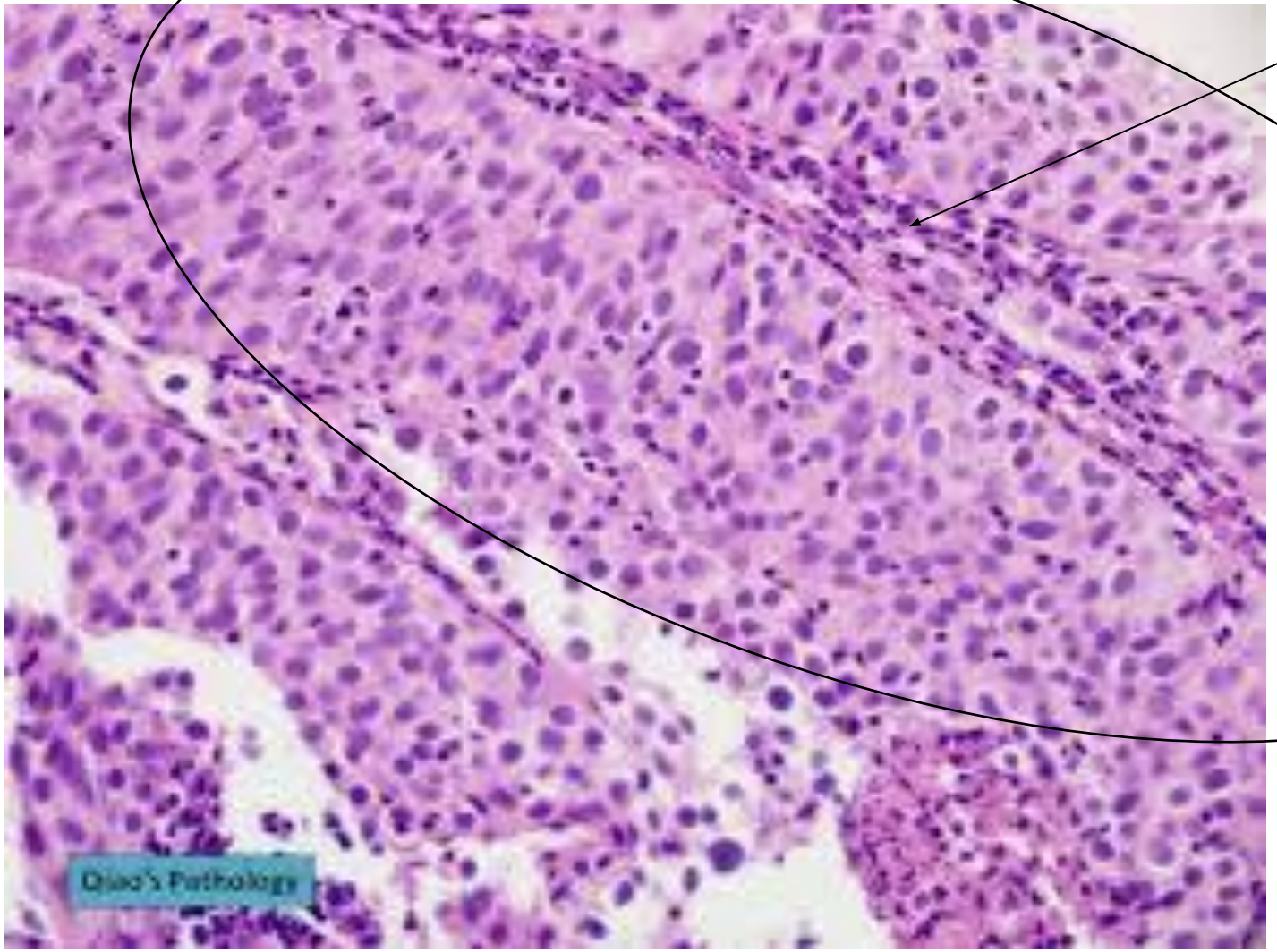
Papillary urothelial carcinoma



Papillary urothelial carcinoma



Papillary urothelial carcinoma



Fibrovascular core

A large papilla

Thank You