

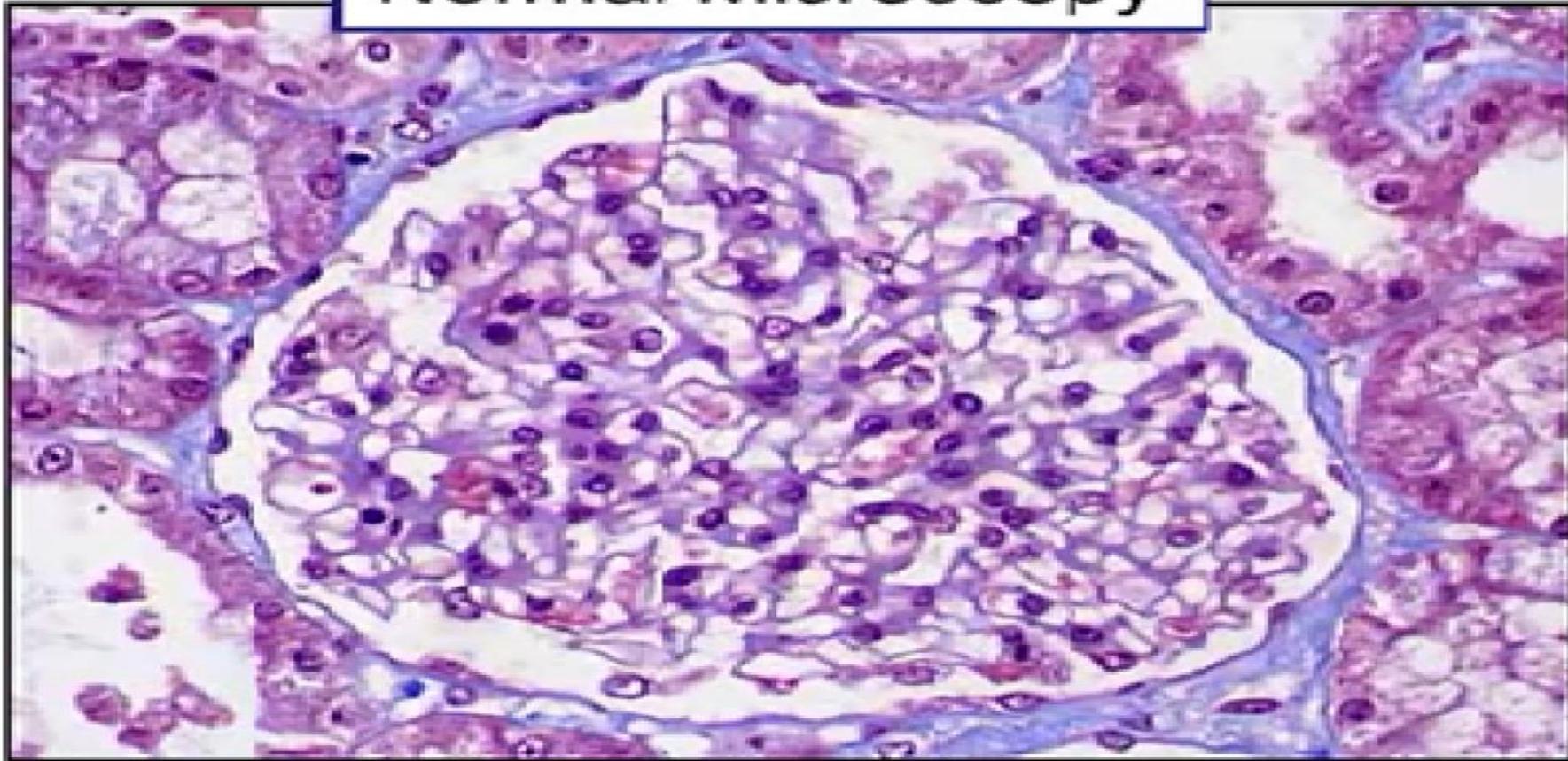
Renal Pathology lab

Sura Al Rawabdeh, Md

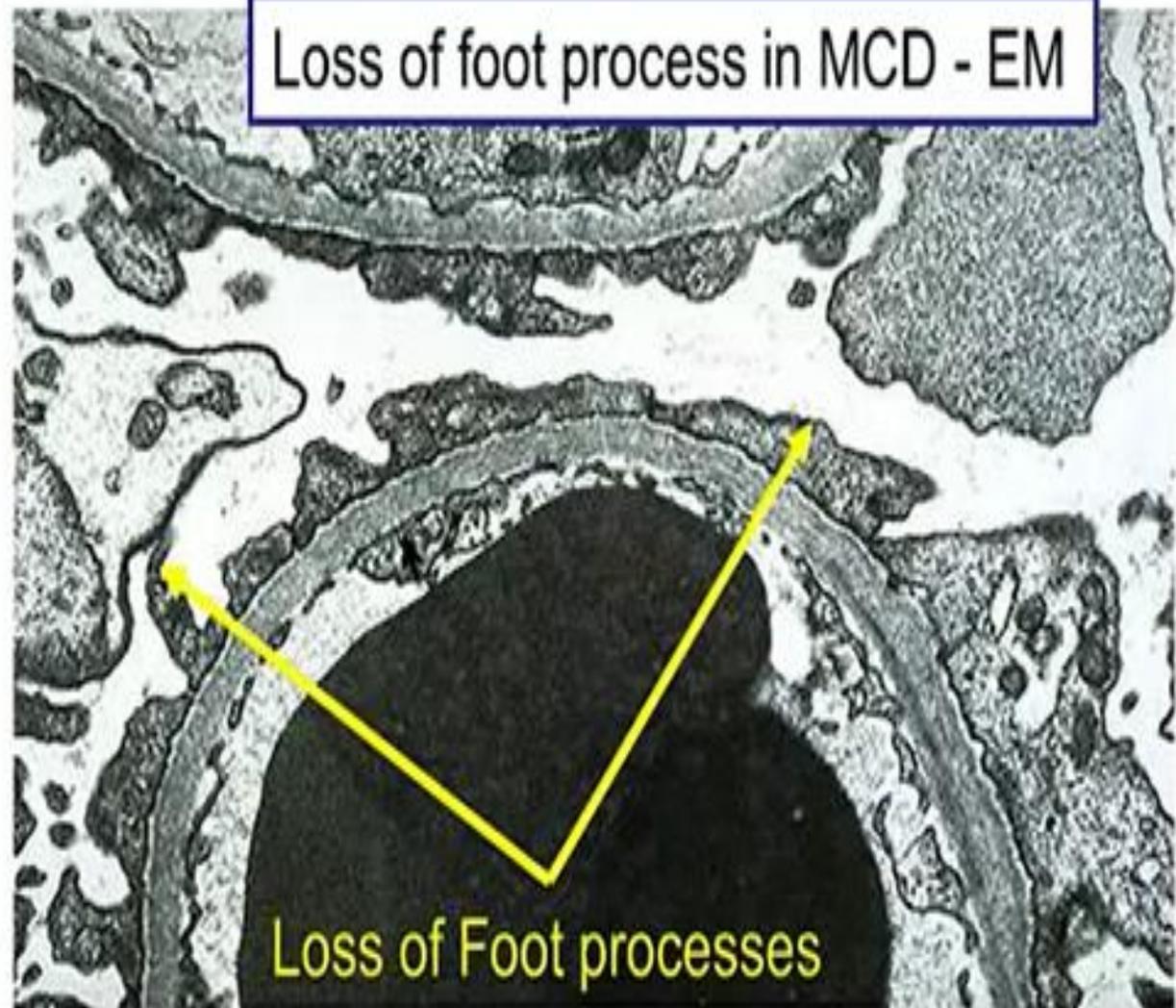
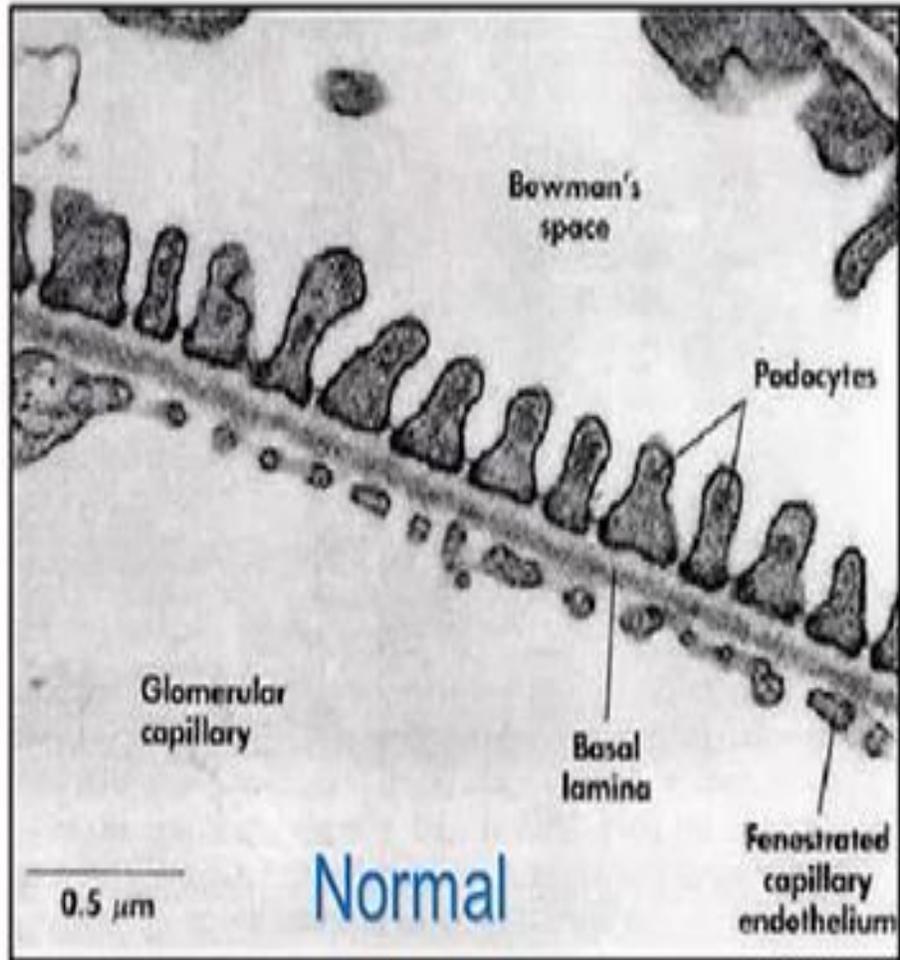
May 10 2023

Minimal Change Disease

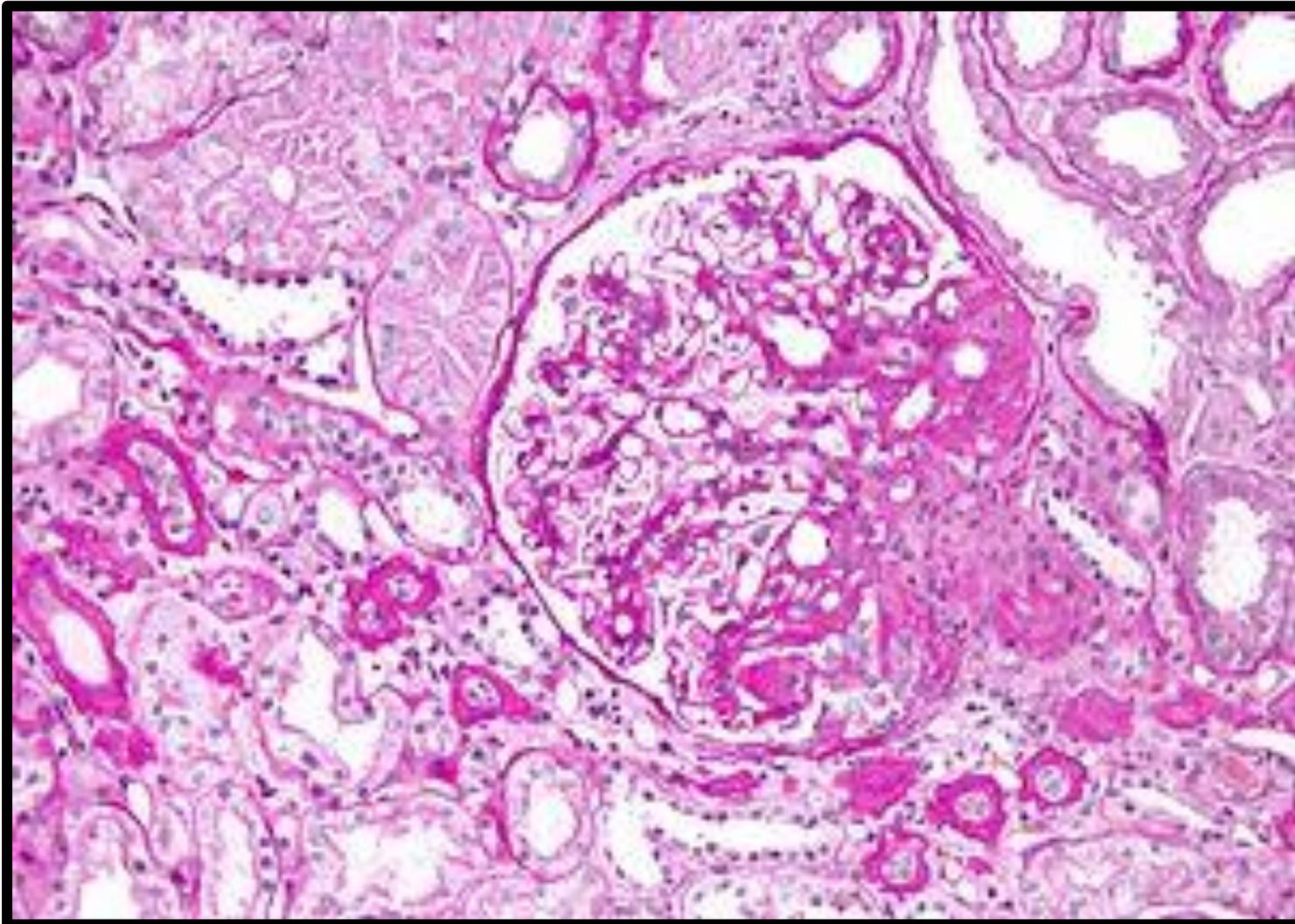
Normal Microscopy



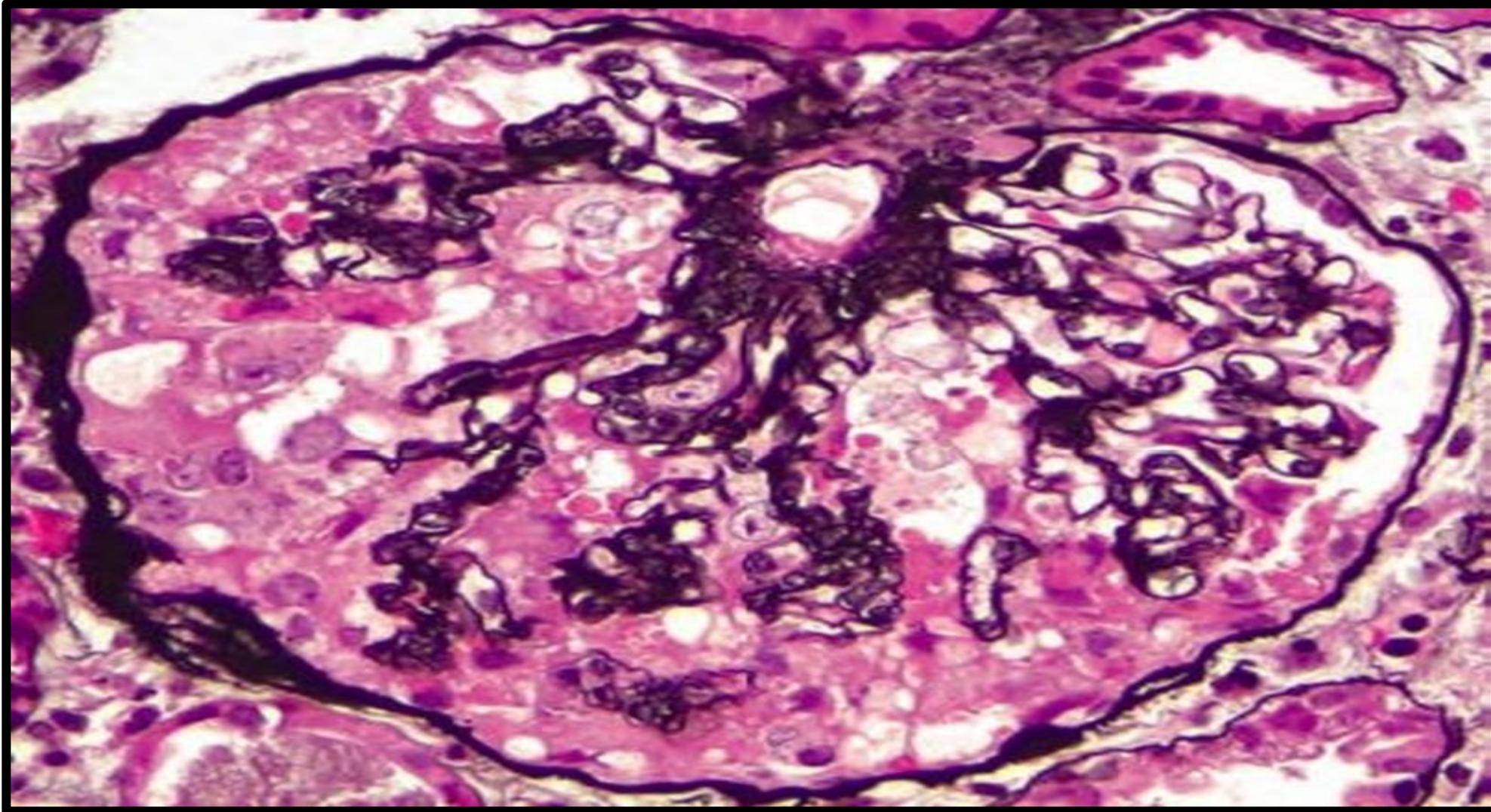
Minimal Change Disease



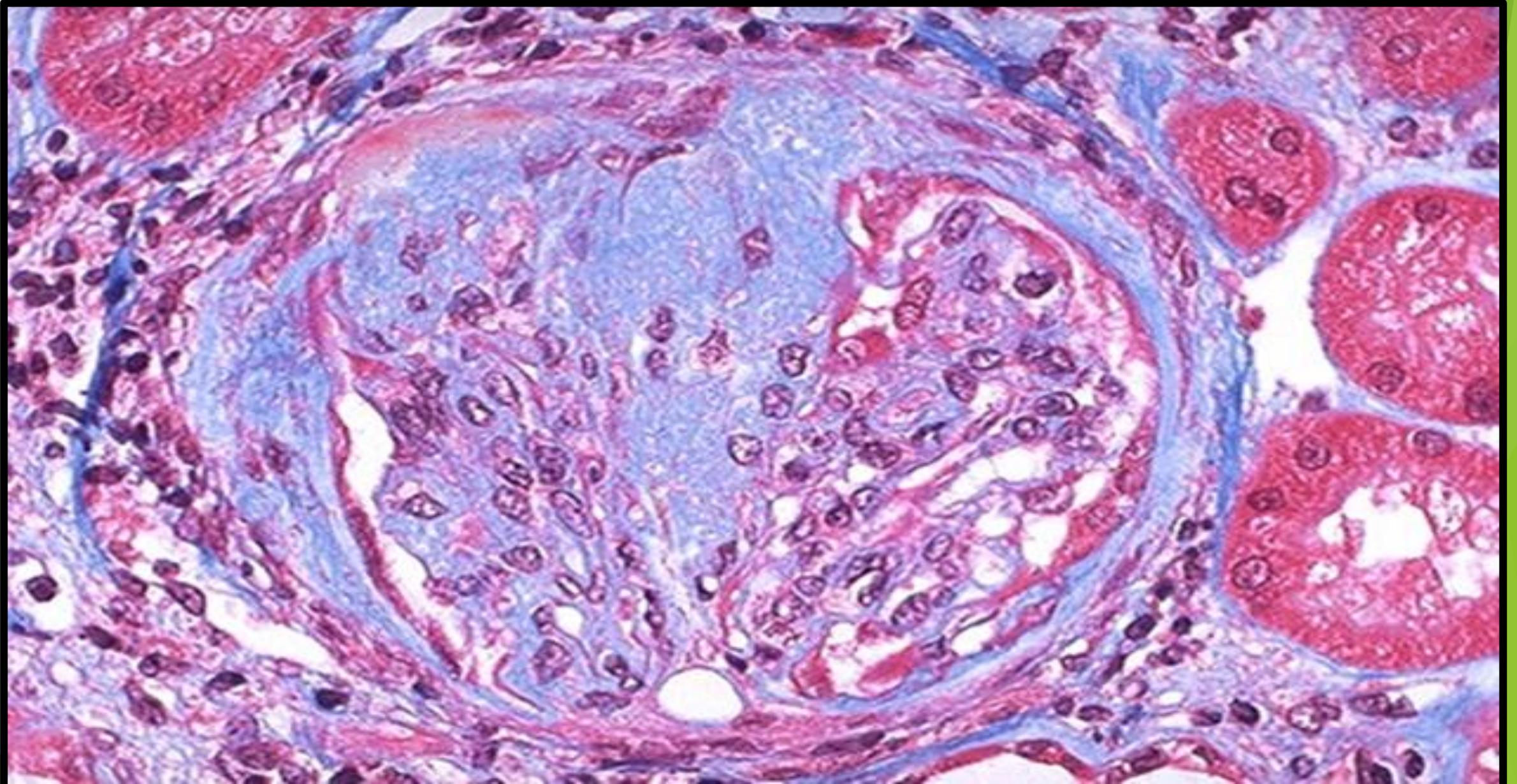
FOCAL SEGMENTAL GLOMERULOSCLEROSIS (FSGS)



FSGS - Morphology

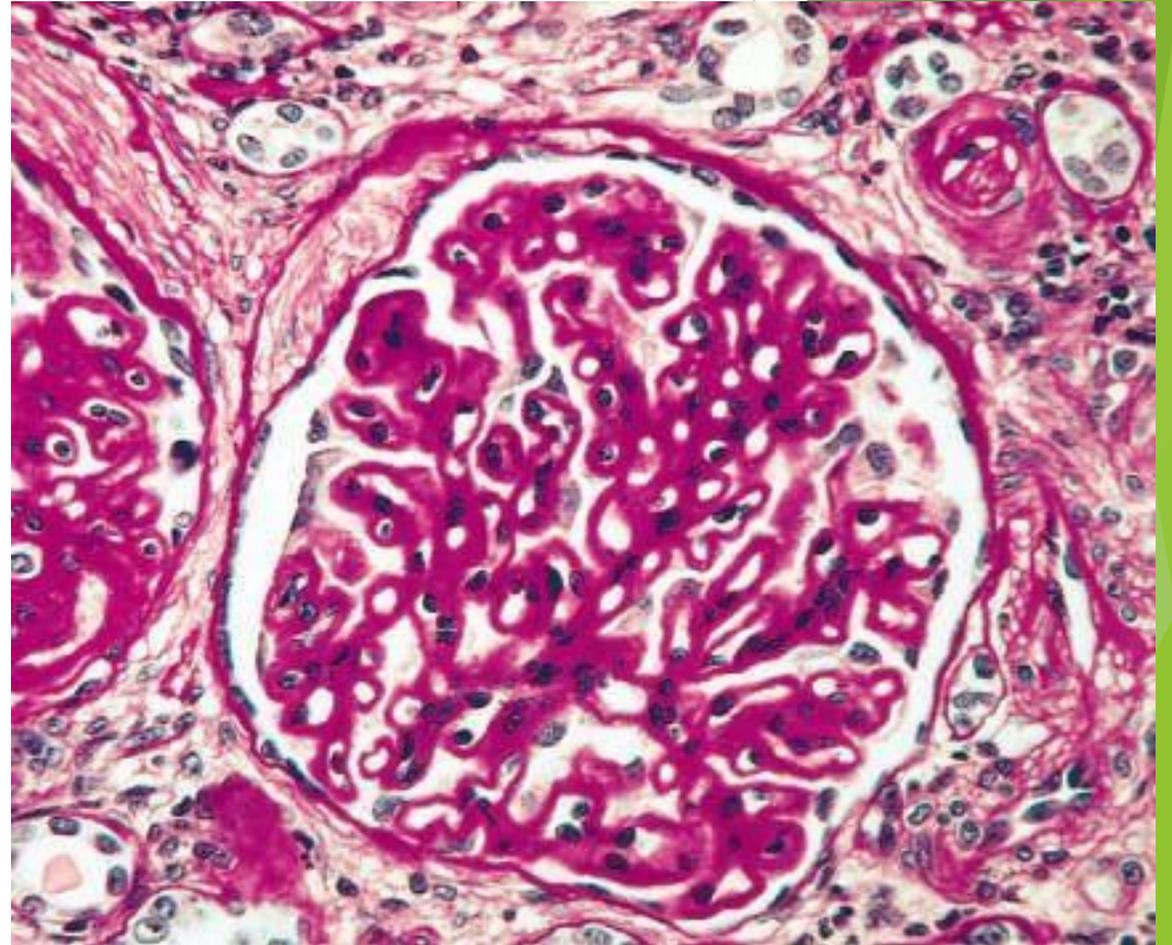


FOCAL SEGMENTAL GLOMERULOSCLEROSIS (FSGS)



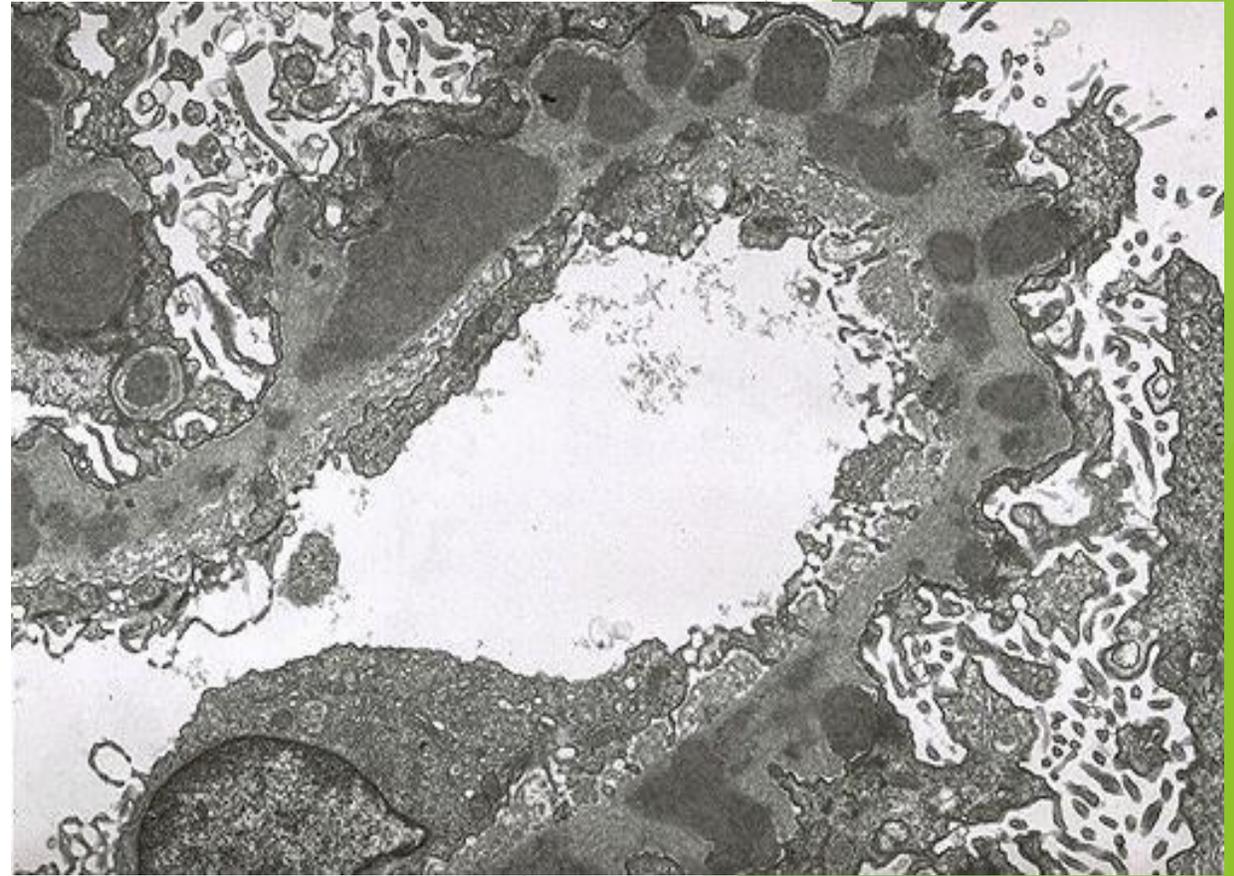
Membranous GN

The main histologic feature is **diffuse thickening** of the capillary wall (GBM glomerular basement PAS stain

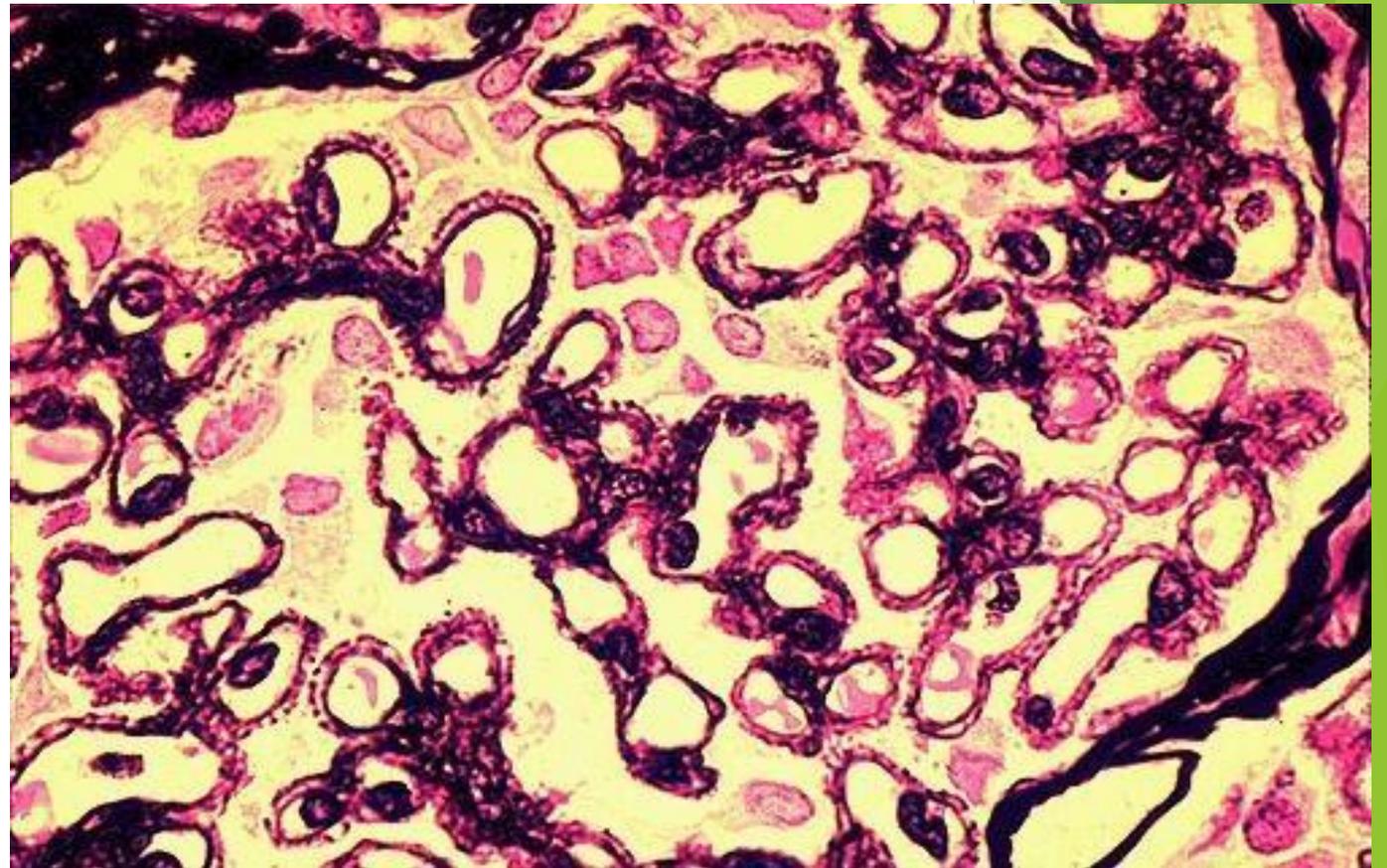
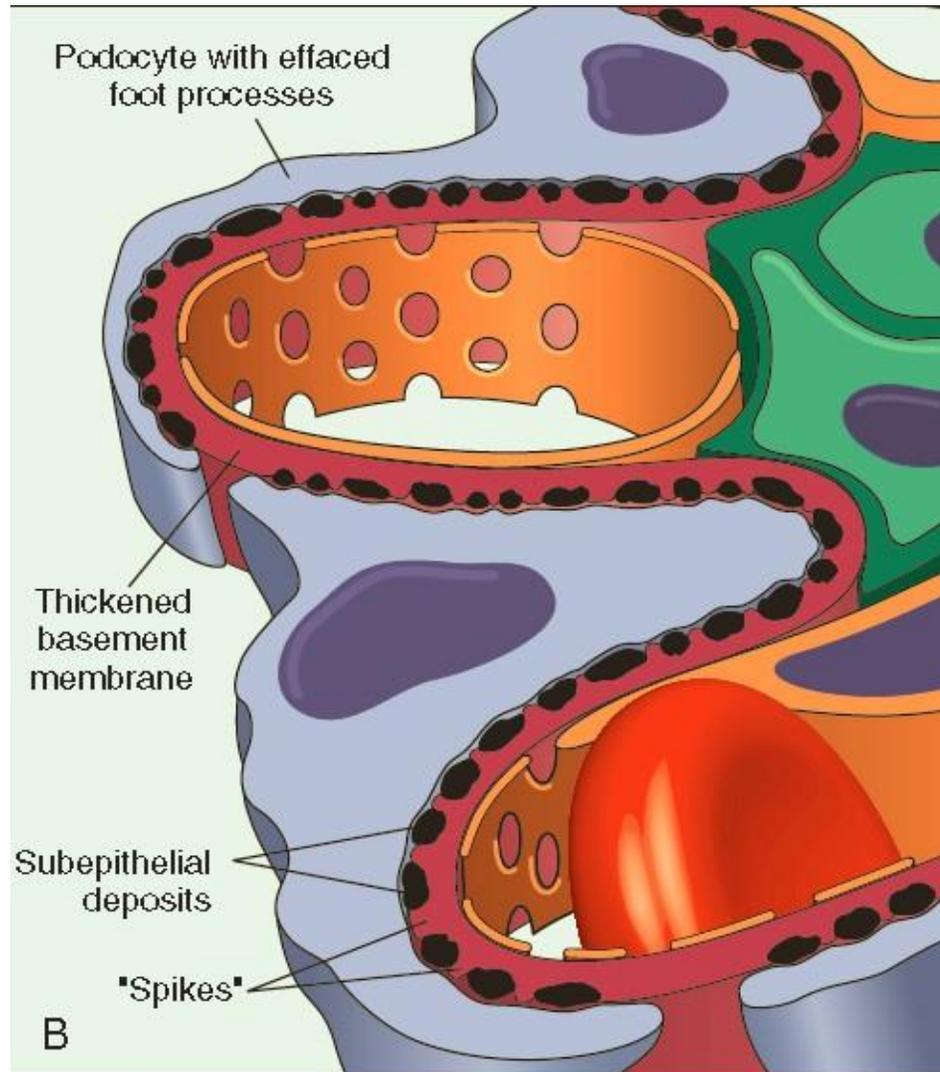


Membranous GN

EM reveals that thickening is caused by **subepithelial** deposits, which nestle against the GBM & are separated from each other by small, spike-like protrusions of GBM matrix that form in reaction to the deposits (**spike & dome pattern**)



Membranous GN



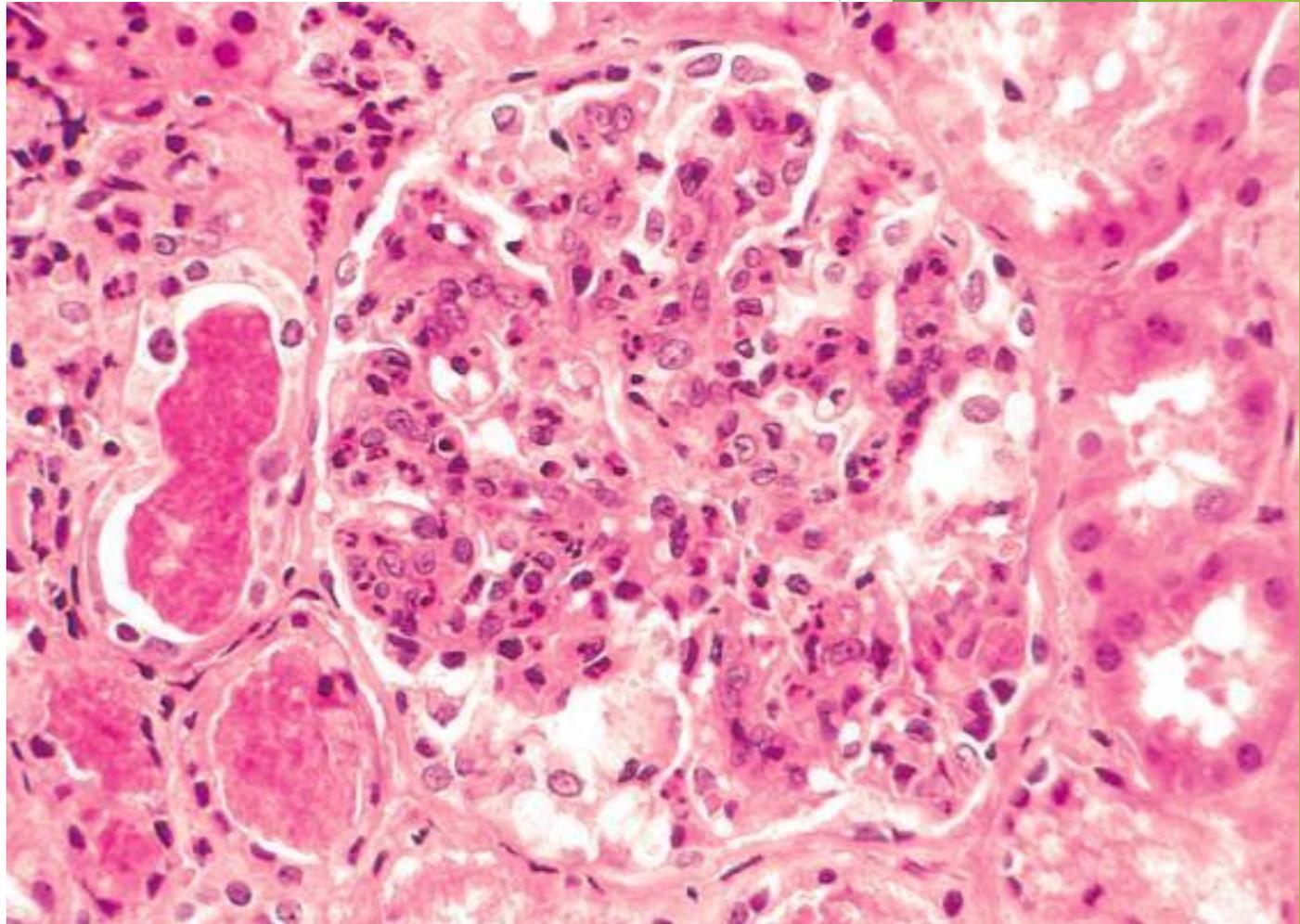
Post infectious GN

LM morphology

Most characteristic change □
increased cellularity of all glomeruli
(nearly all glomeruli) □ caused by

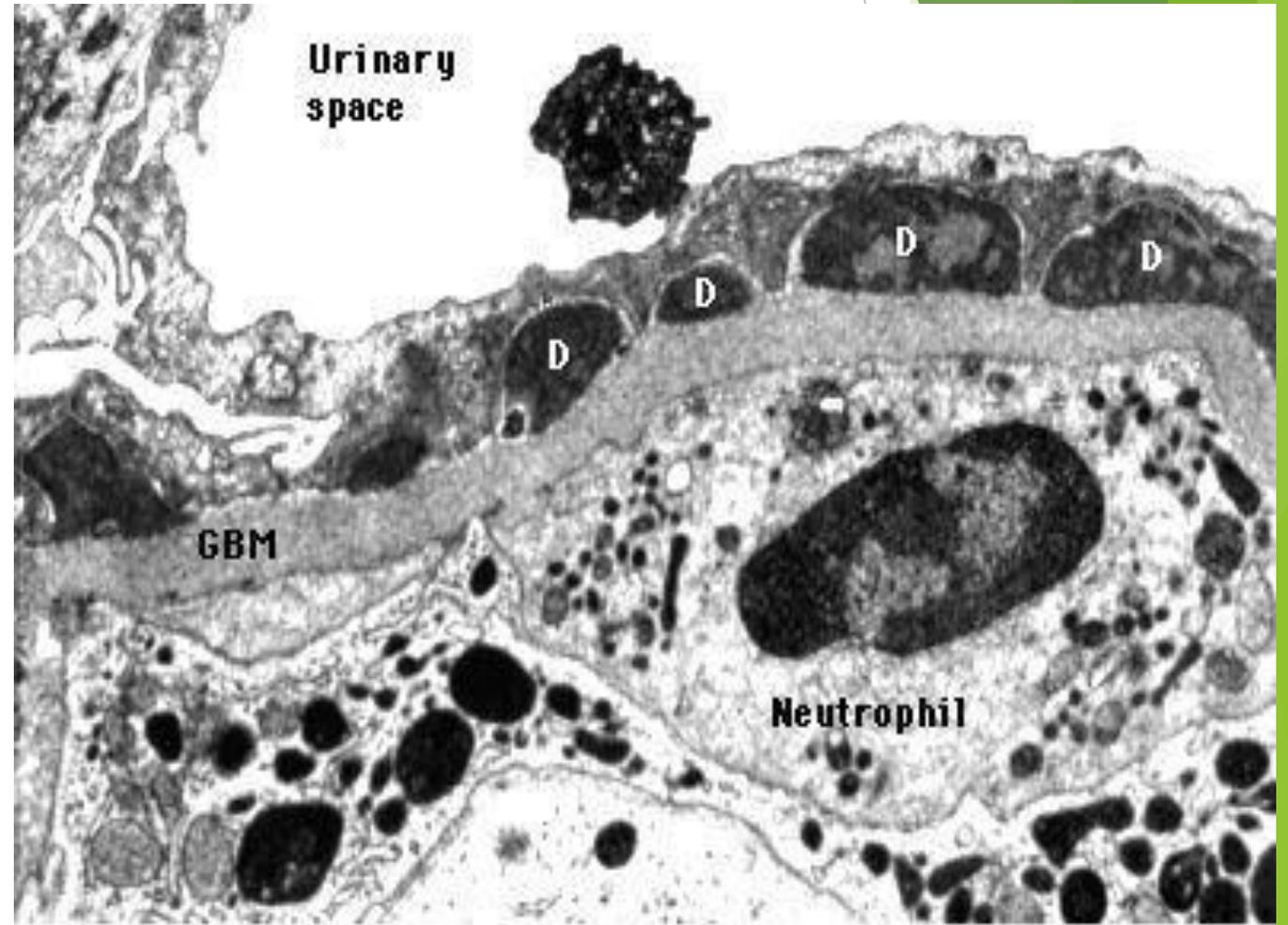
(1) proliferation & swelling of
endothelial & mesangial cells

(2) by infiltrating **neutrophils** &
monocytes.



Post infectious GN EM morphology

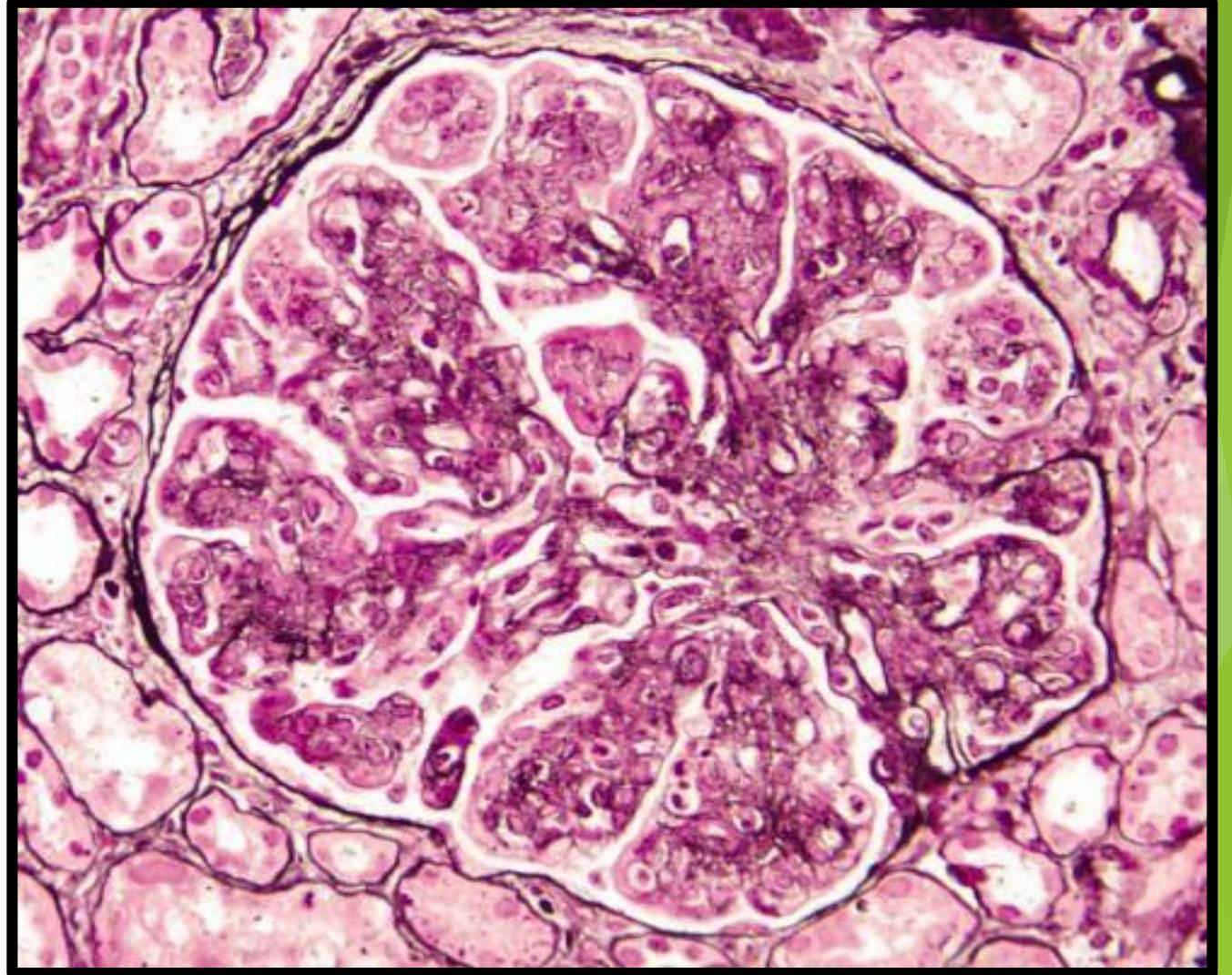
EM: shows deposited immune complexes as **subepithelial “humps”** (on the epithelial side of GBM)
IF: scattered granular deposits of IgG & complement within the capillary walls



Membranoproliferative (mesangiocapillary) GN

MPGN

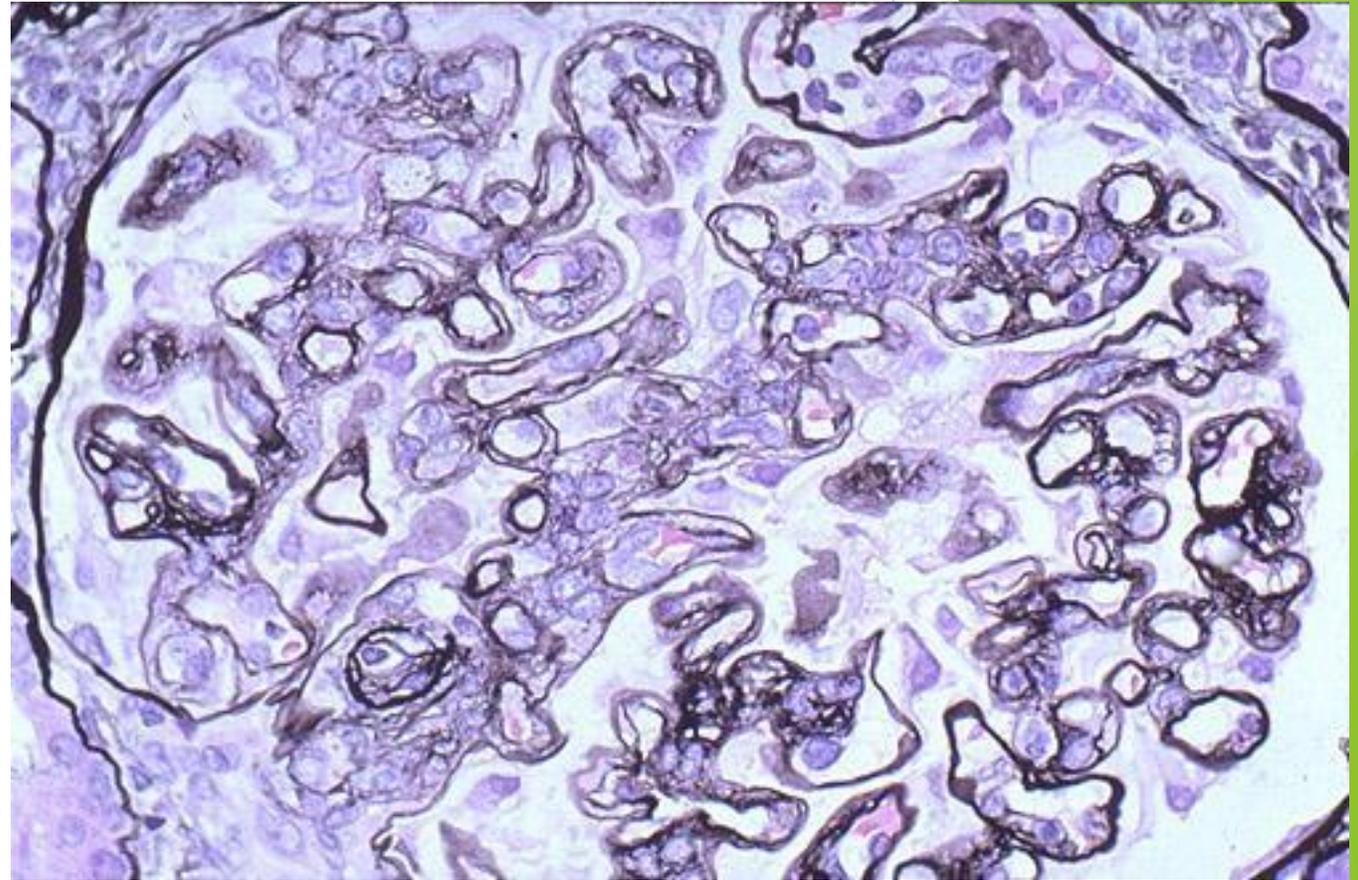
Glomeruli are large, have an accentuated lobular appearance; proliferation of mesangial & endothelial cells as well as infiltrating leukocytes



MPGN

LM morphology

The GBM is thickened, and the glomerular capillary wall often shows a **double contour**, or **“tram track,”** appearance, especially evident with use of silver



MPGN II/ DDD

There are **dense homogeneous** deposits within the basement membrane. **Ribbon-like appearance** of subendothelial & intramembranous material



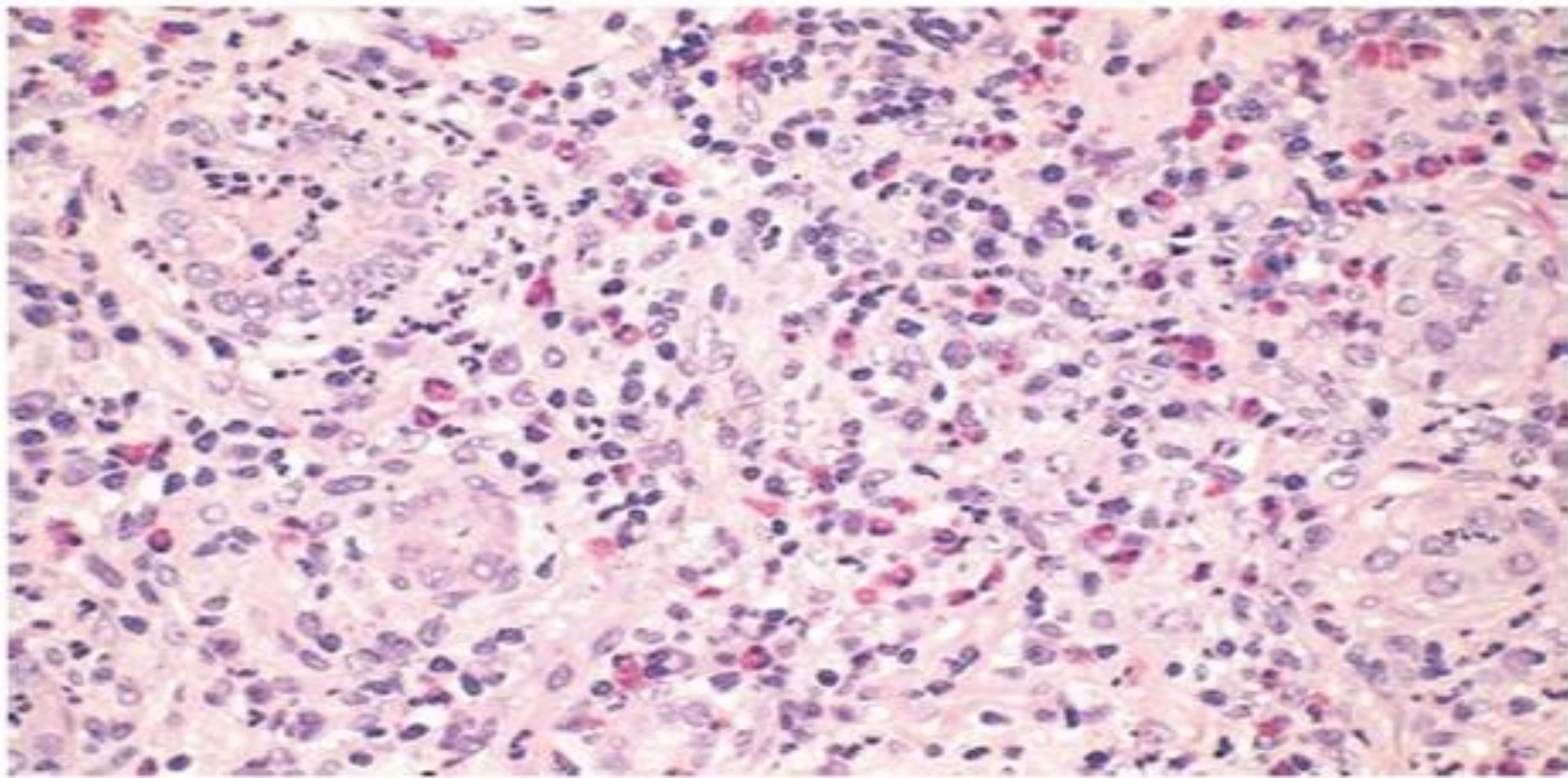


Figure 13-16 Drug-induced interstitial nephritis, with prominent eosinophilic and mononuclear infiltrate.

The background features abstract, overlapping geometric shapes in various shades of green, ranging from light lime to dark forest green. These shapes are primarily located on the right side of the frame, creating a modern, layered effect. The rest of the background is plain white.

Thank you

Good luck