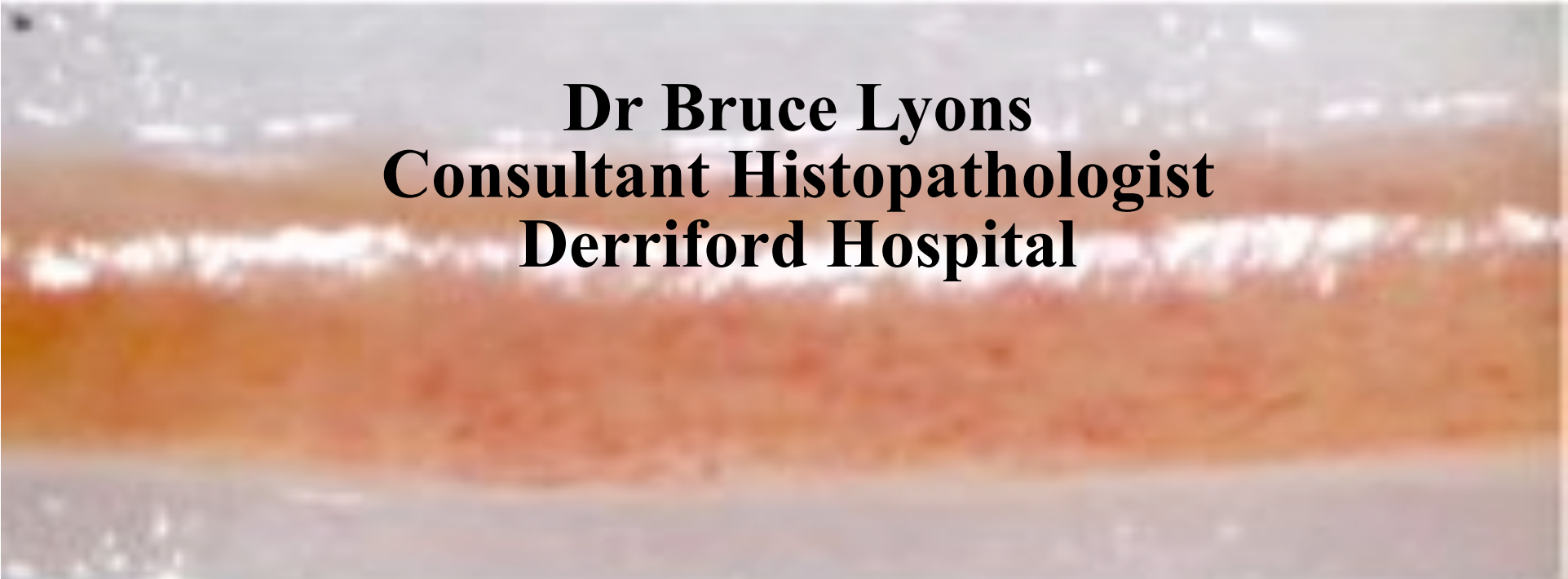
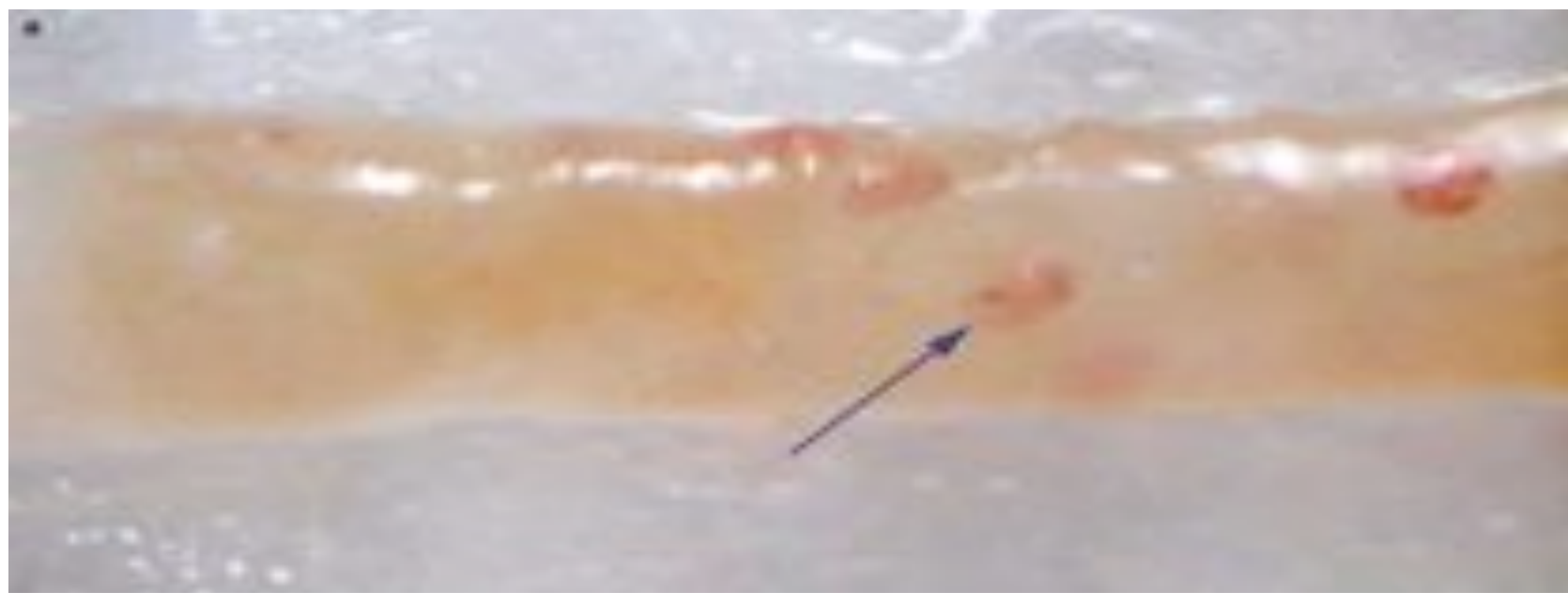




**RENAL BIOPSY INTERPRETATION**  
(for the MRCPath Exam.)



**Dr Bruce Lyons**  
**Consultant Histopathologist**  
**Derriford Hospital**

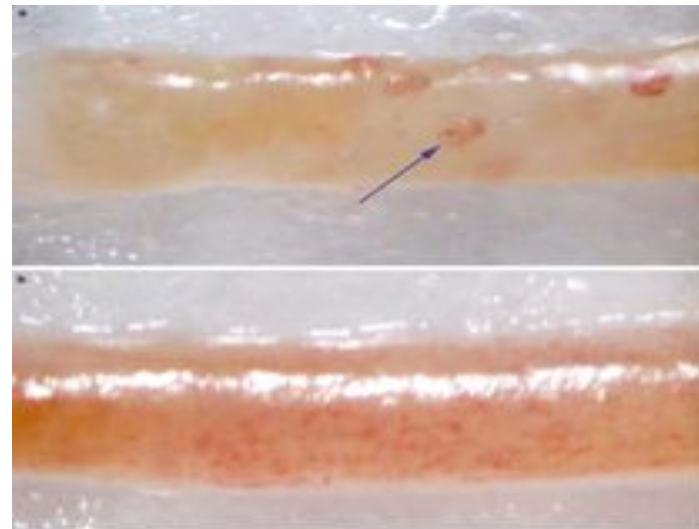


# Cases for final MRCPATH exam.

- IgA nephropathy/ Henoch-Schonlein Purpura
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- Anti-GBM GN ("Goodpasture's")
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- Membranous GN
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- Scleroderma
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- Vasculitis
- Renovascular disease/Embolus

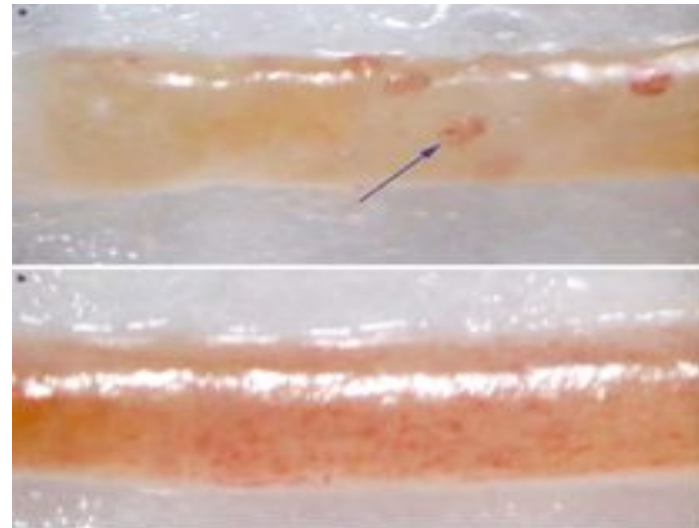
# Biopsy handling

- 2 cores
- 2-3 gloms- IMF/P
- 2-3 gloms- EM
- Rest of tissue- Paraffin

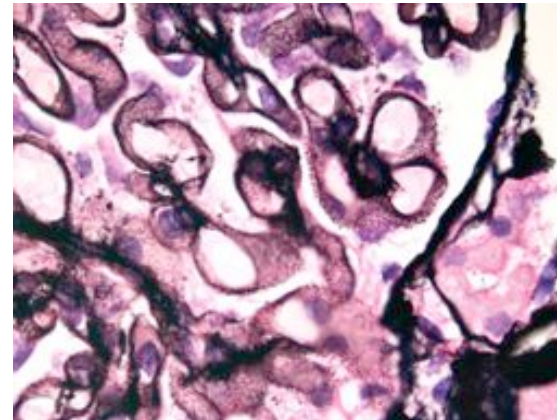
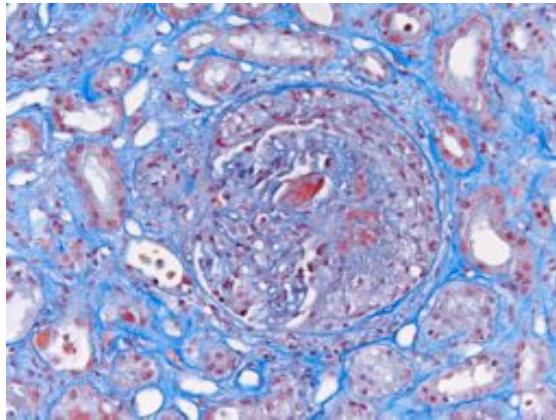
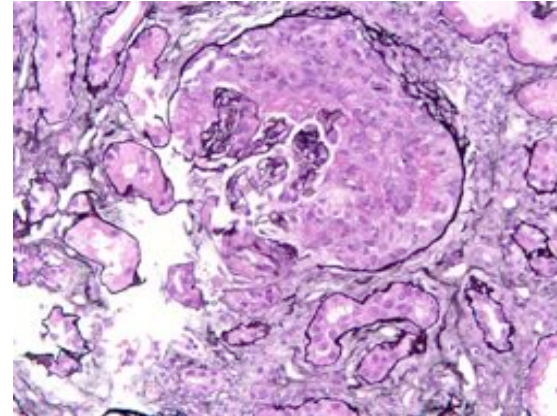
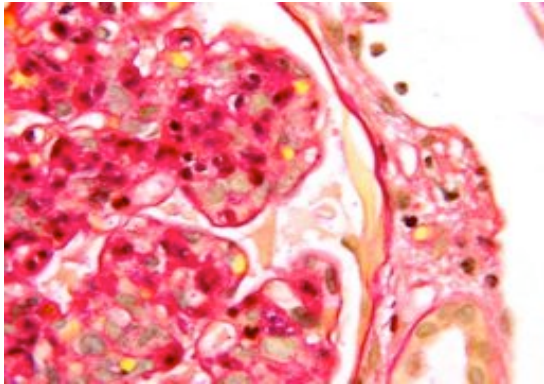


# Cutting & Staining

- 2 $\mu$  Paraffin Serials
- H&E: S1 S10 S20
- Sliver (Gomori)
- PAS
- MSB (fibrin)
- EVG
- Congo Red



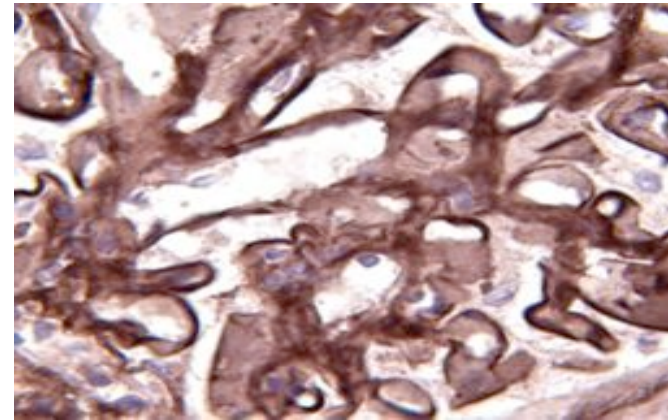
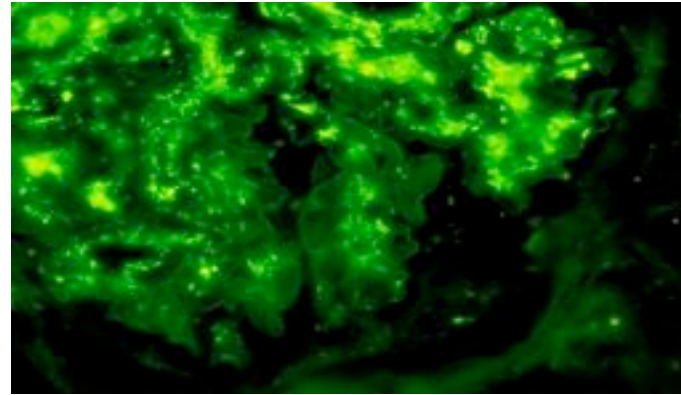
# Cutting & Staining





# Immunohistochemistry

- IMF (Frozen)
- IMP (Frozen or Paraffin)
- **IgA**
- **IgG**
- **IgM**
- **C3**
- **C1q**



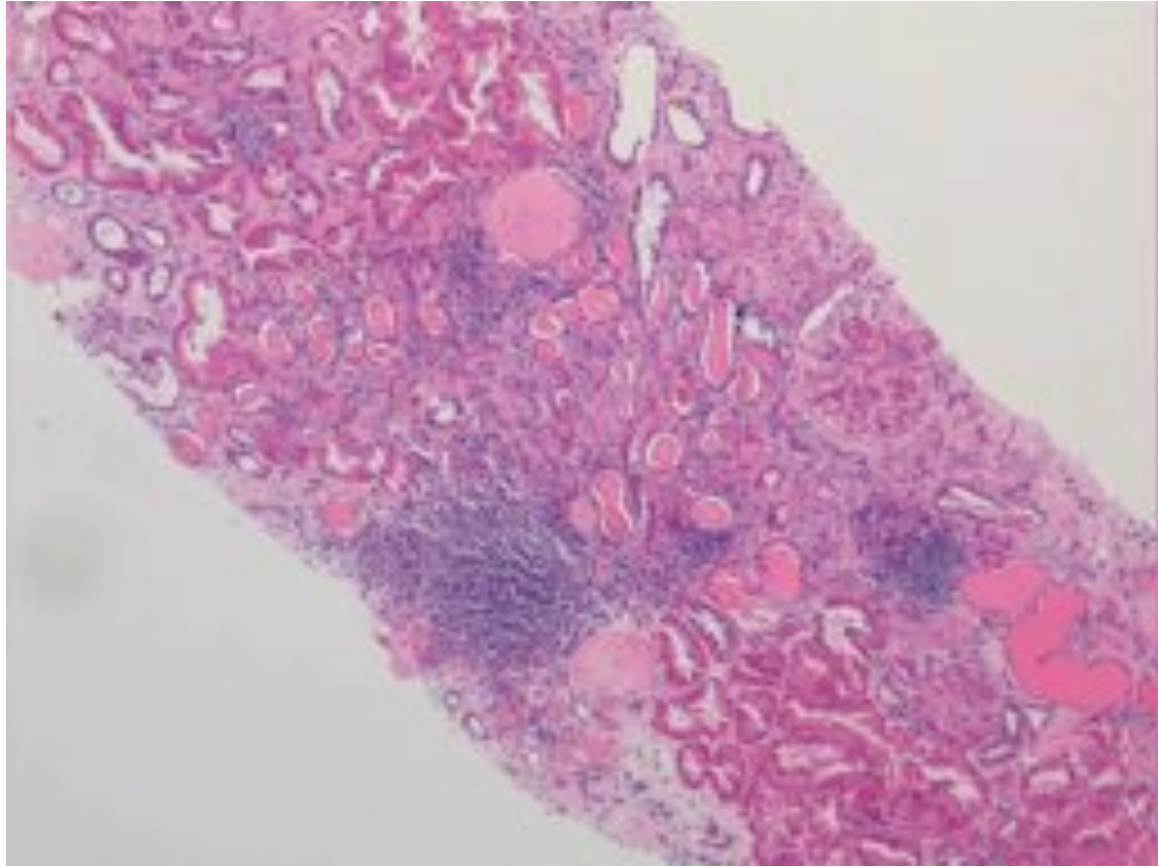
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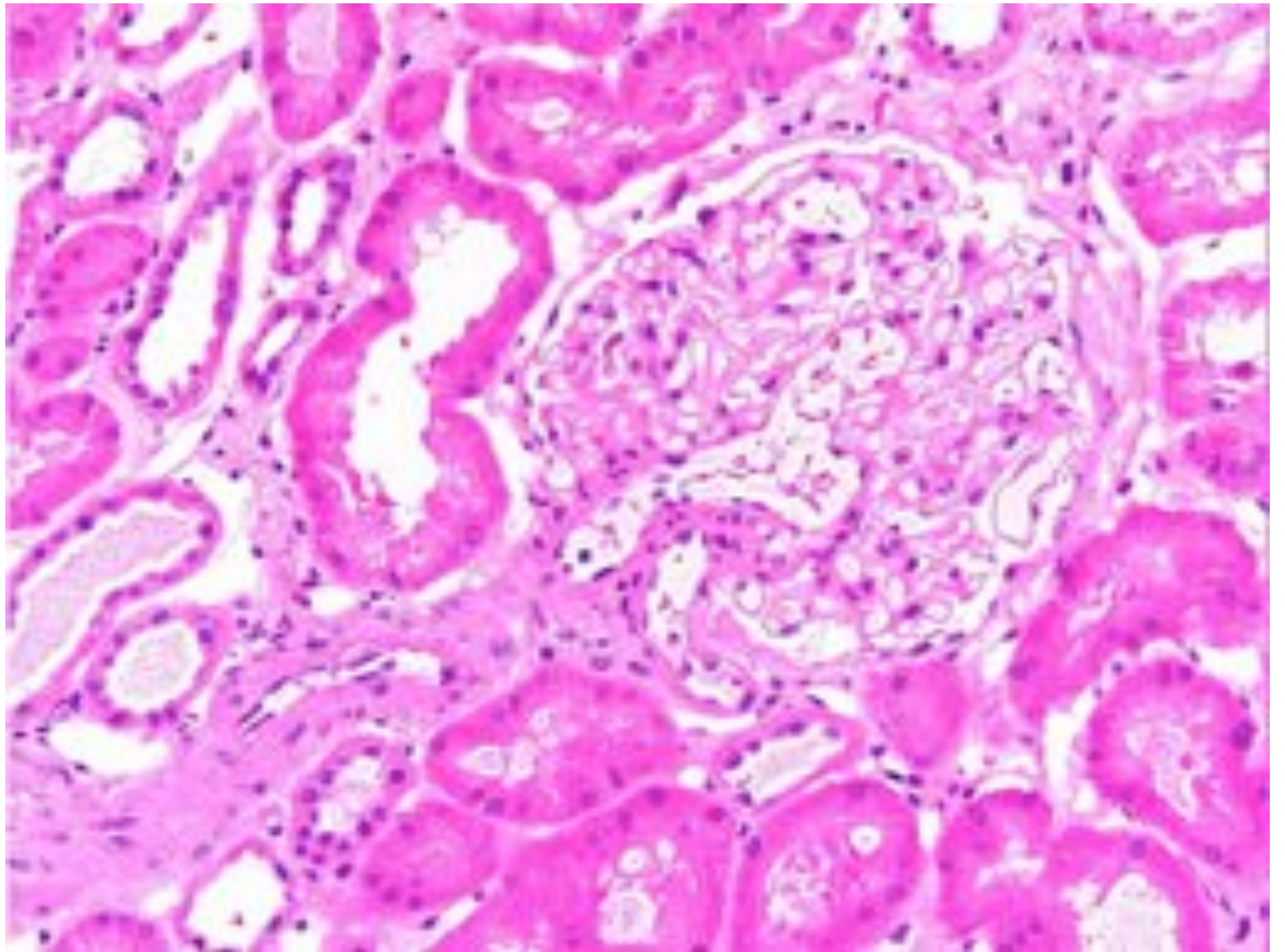
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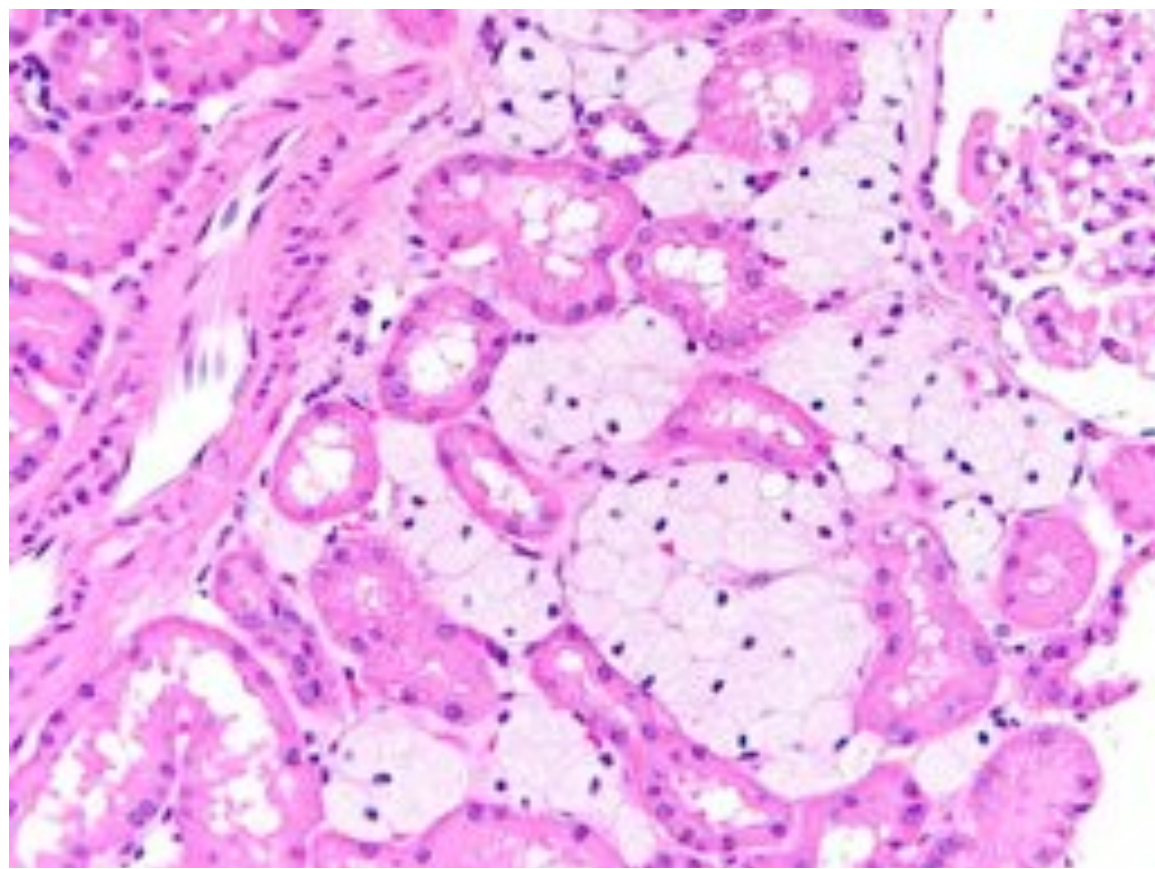
# RENAL BIOPSY REPORT

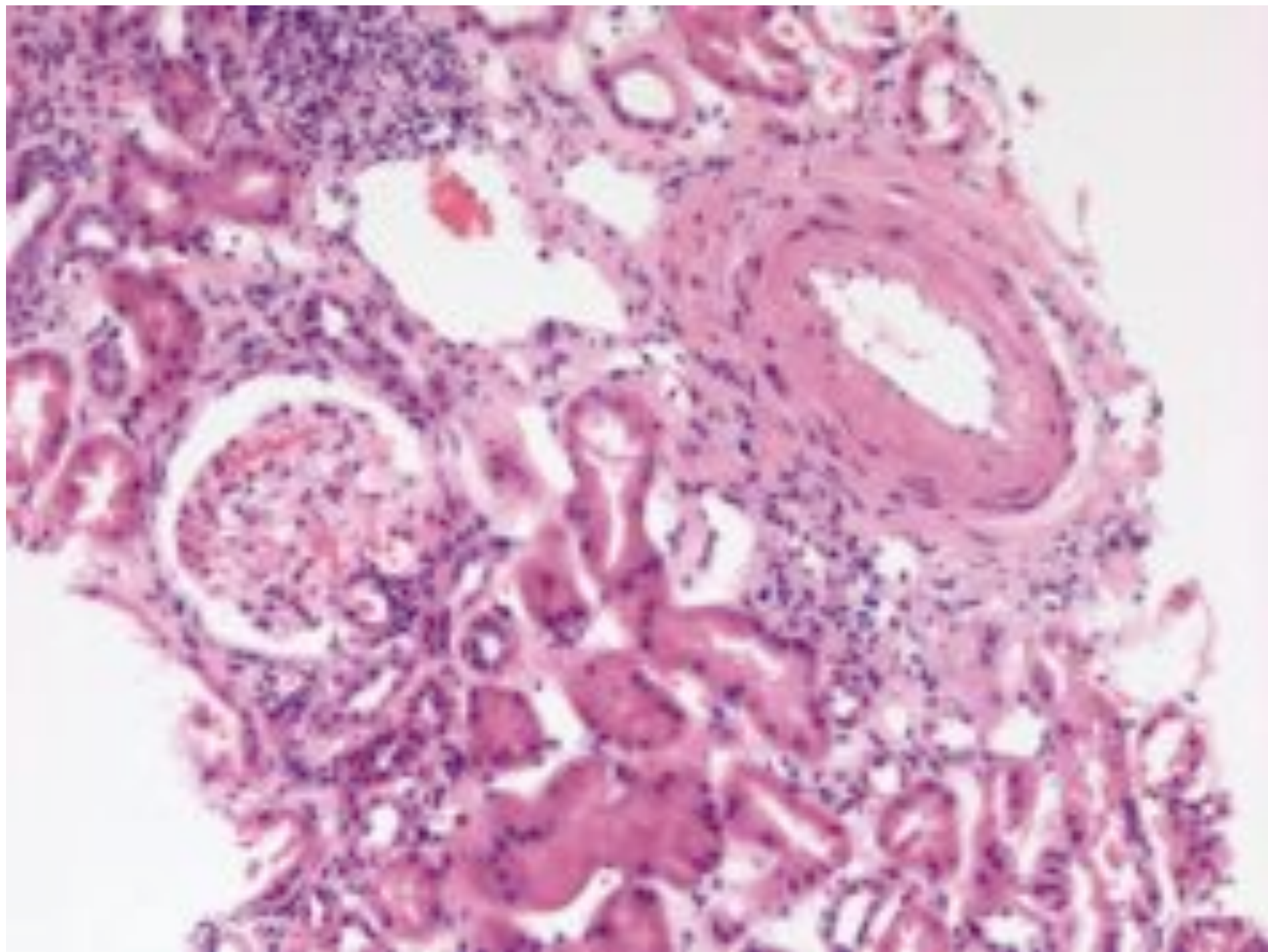
- Introduction:
- Glomeruli:
- Tubules & Interstitium:
- Vessels:
- Immunohistochemistry:
- EM
- Conclusion

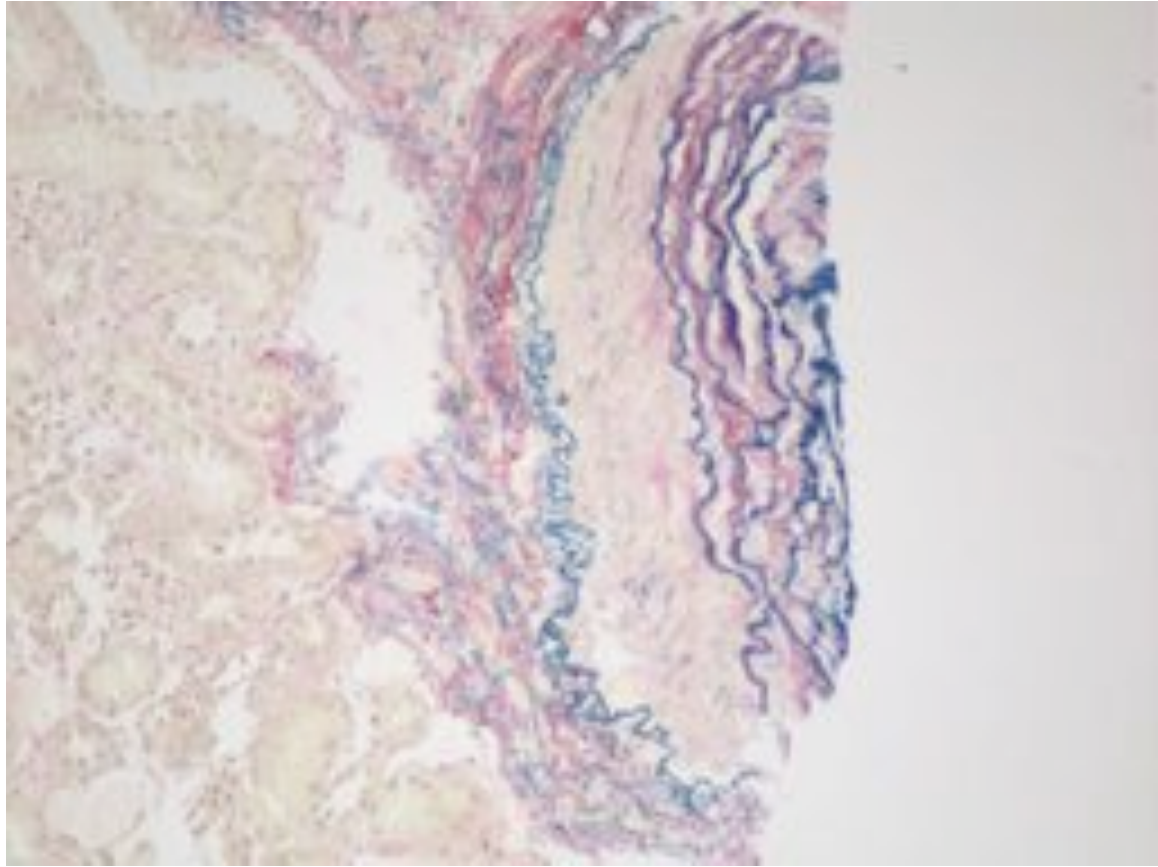




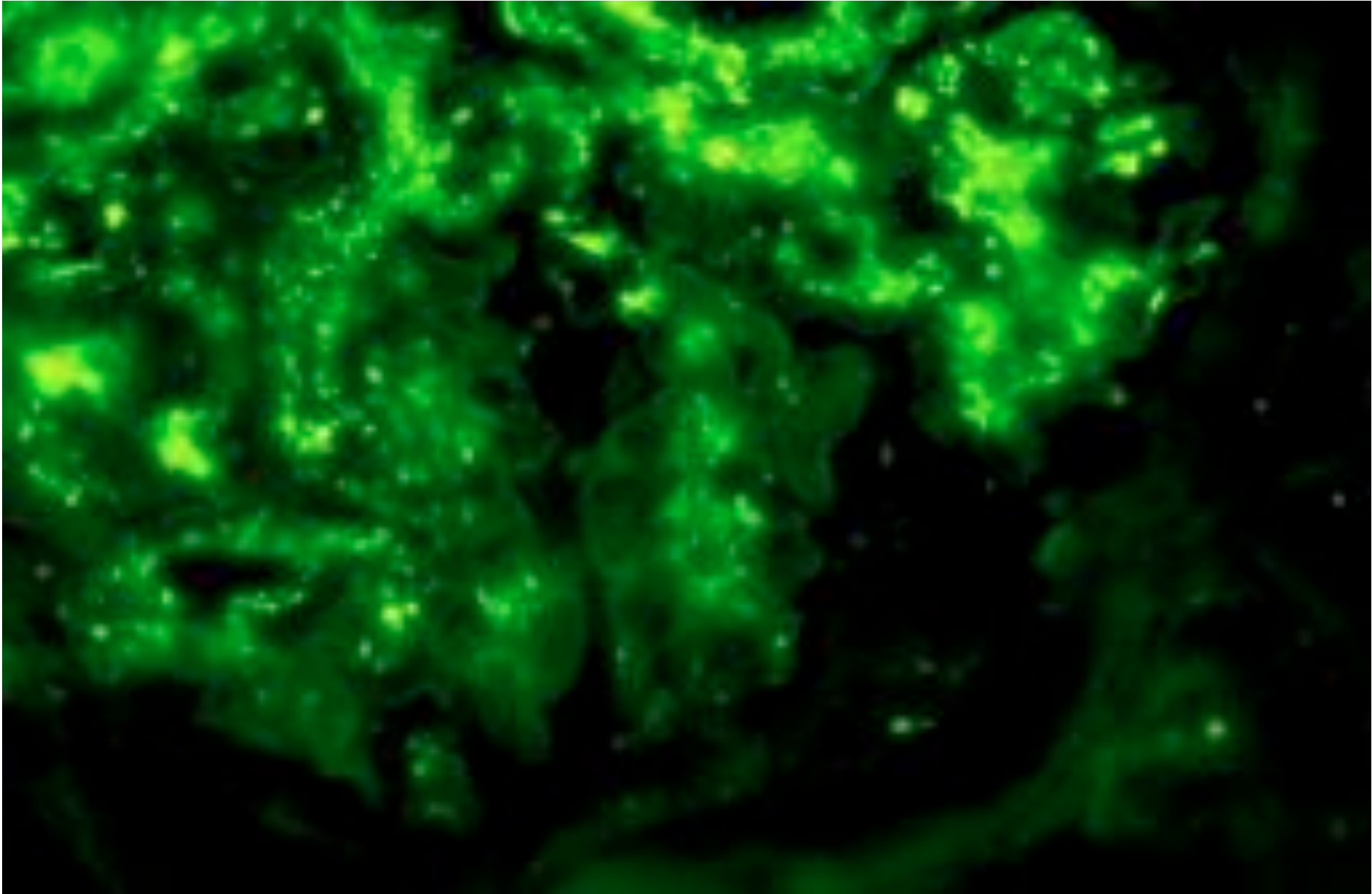


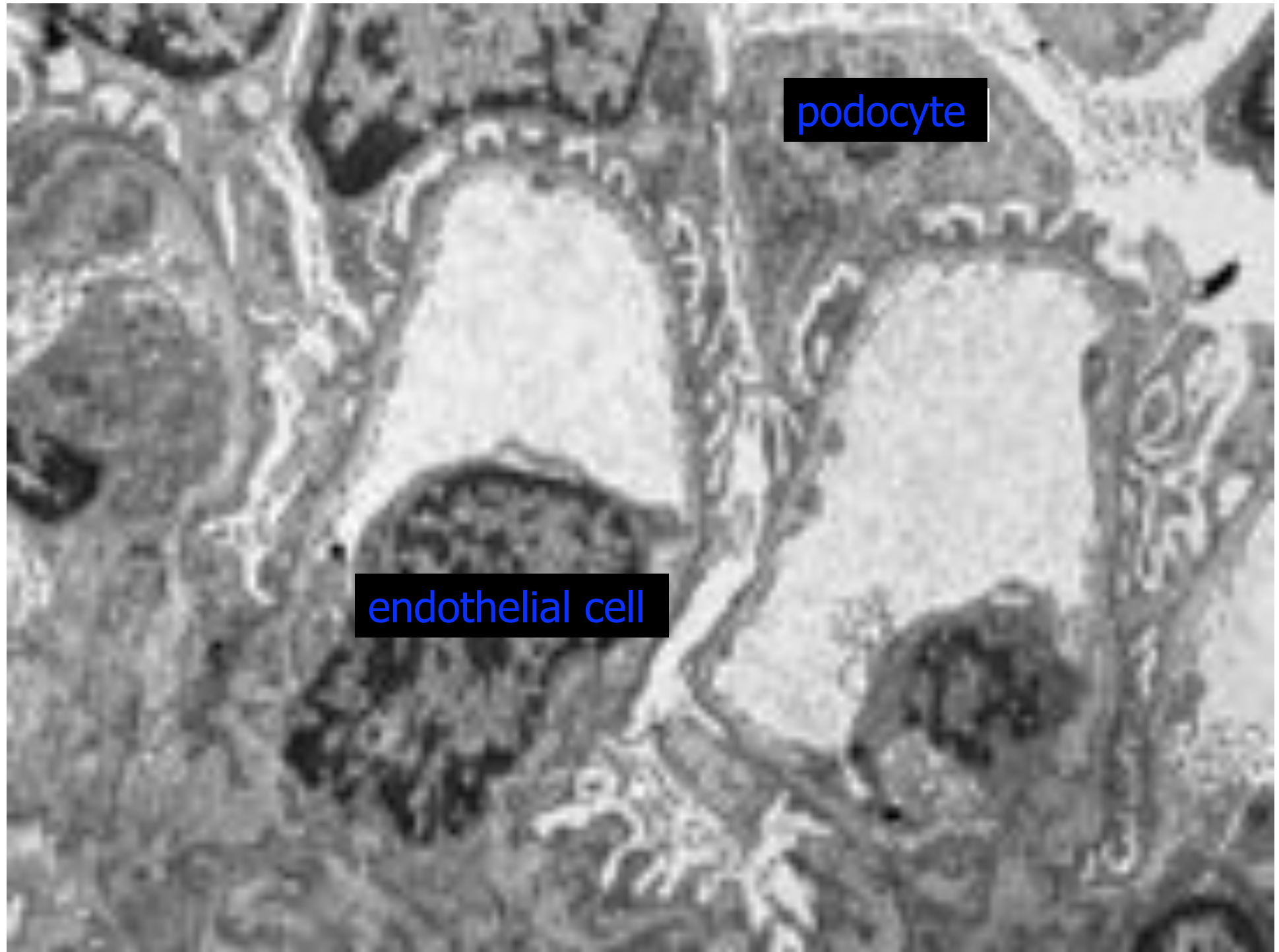












podocyte

endothelial cell

# RENAL BIOPSY REPORT

- Introduction:
- Glomeruli:
- Tubules & Interstitium:
- Vessels:
- Immunohistochemistry:
- EM
- Conclusion

# Clinical history

- Asymptomatic microscopic haematuria
- Nephritic
  
- Mild proteinuria
- Nephrotic
  
- ARF (+/- above)
- CRF (+/- above)

# CONCLUSION:

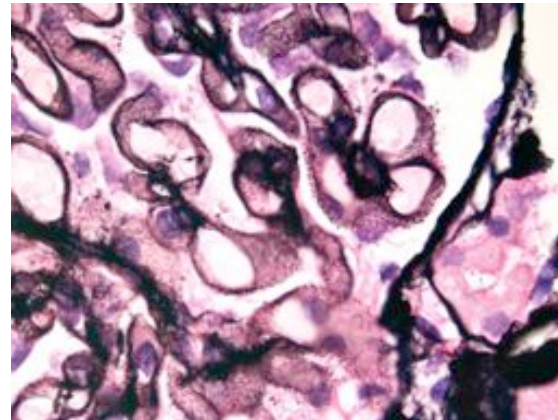
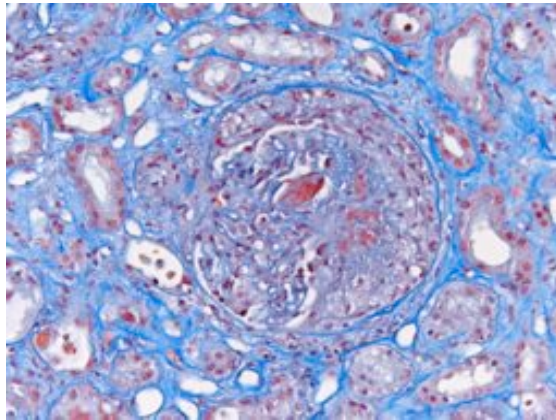
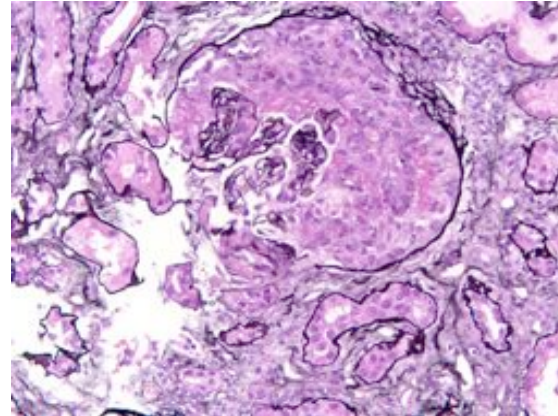
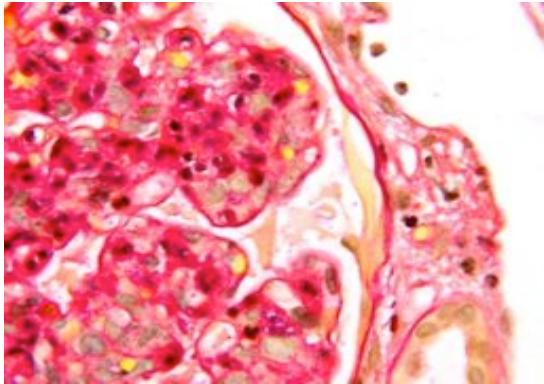
- Primary diagnosis / pathology.
  - (+/- **associated pathologies (good eg. = myeloma)**)
- Important secondary pathology(ies)
  - **eg. Arteriosclerosis, HTN, DM**
- (Multiple unrelated pathologies uncommon)
- Aetiology but not pathogenesis

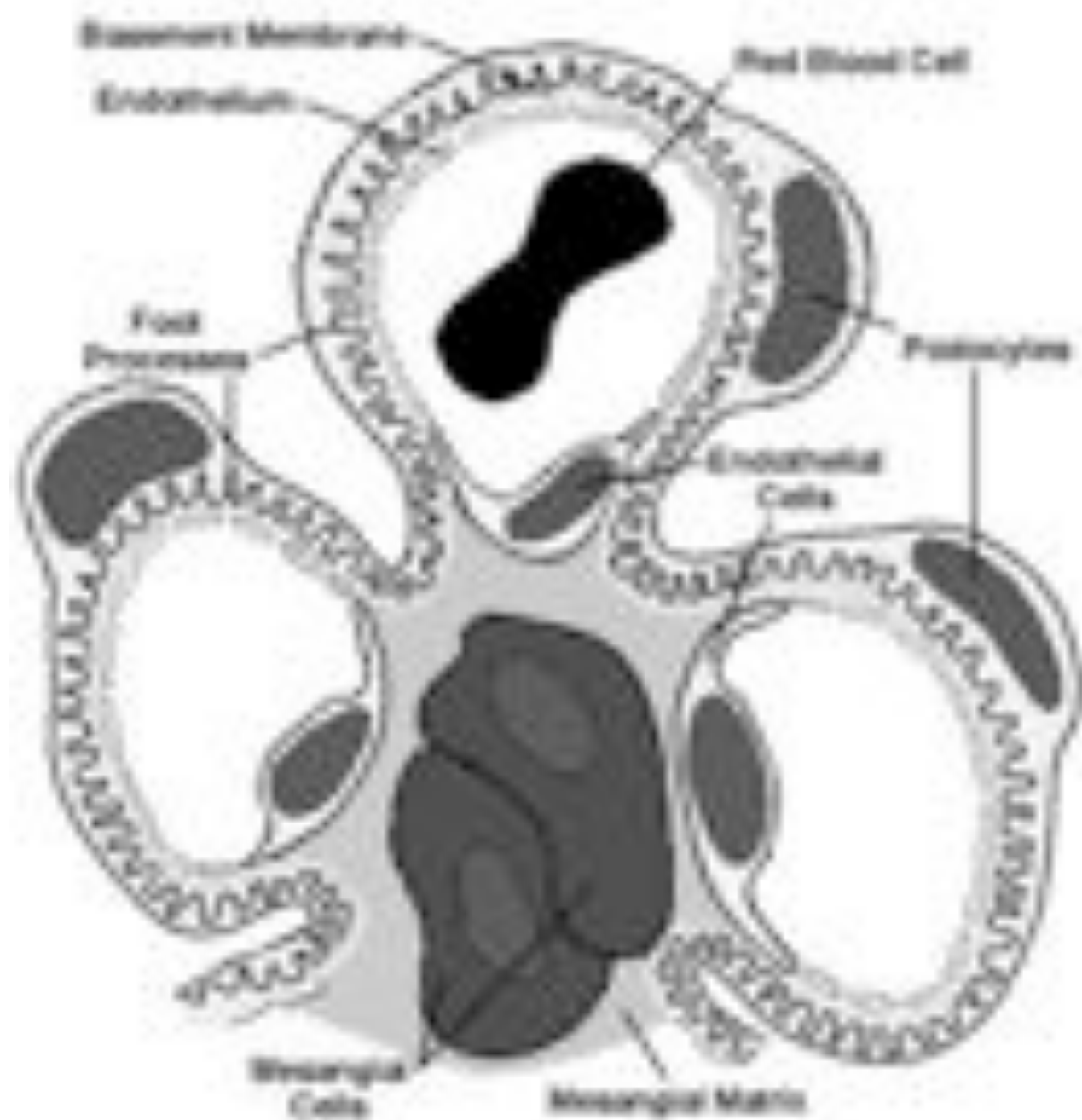
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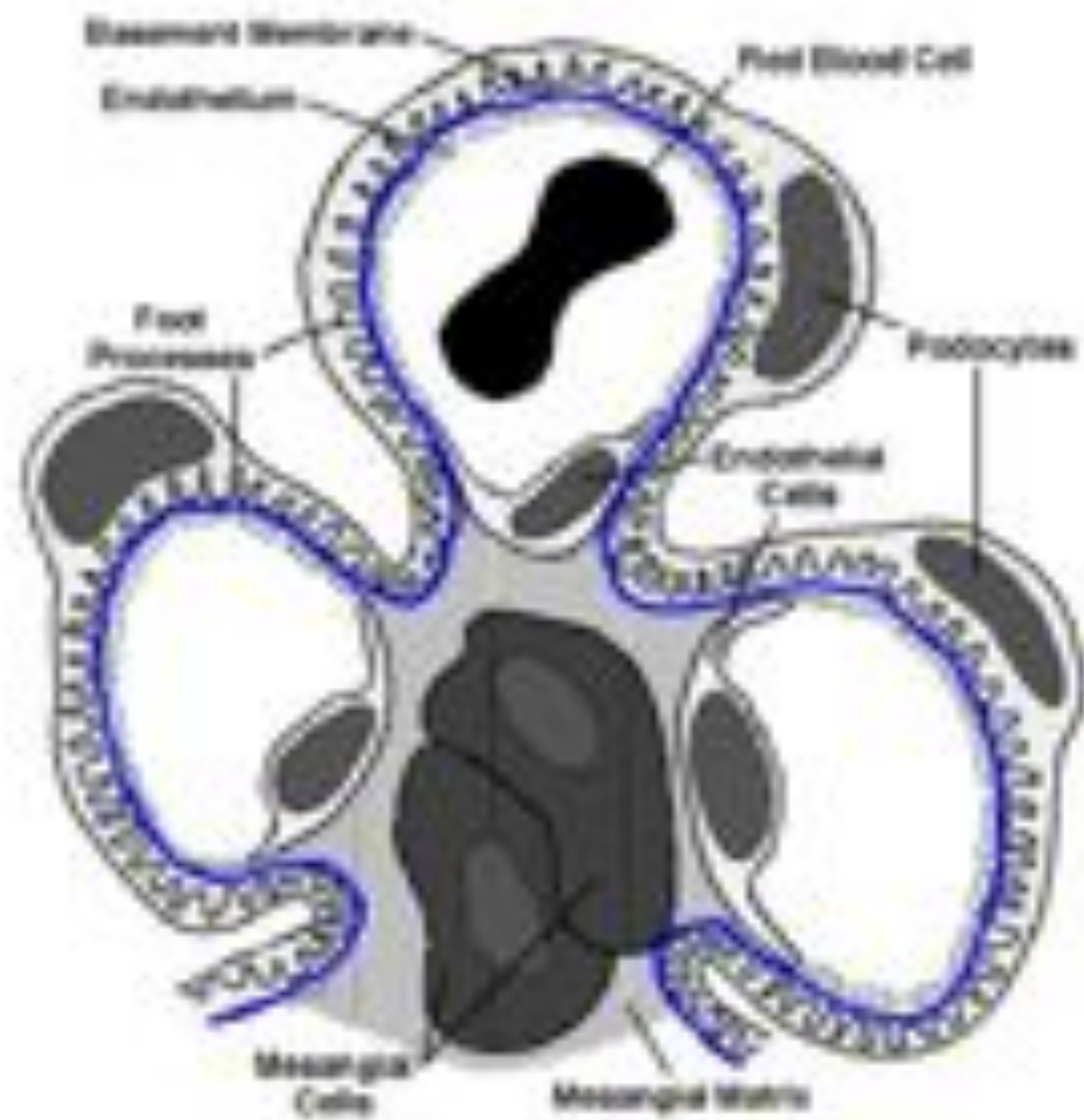
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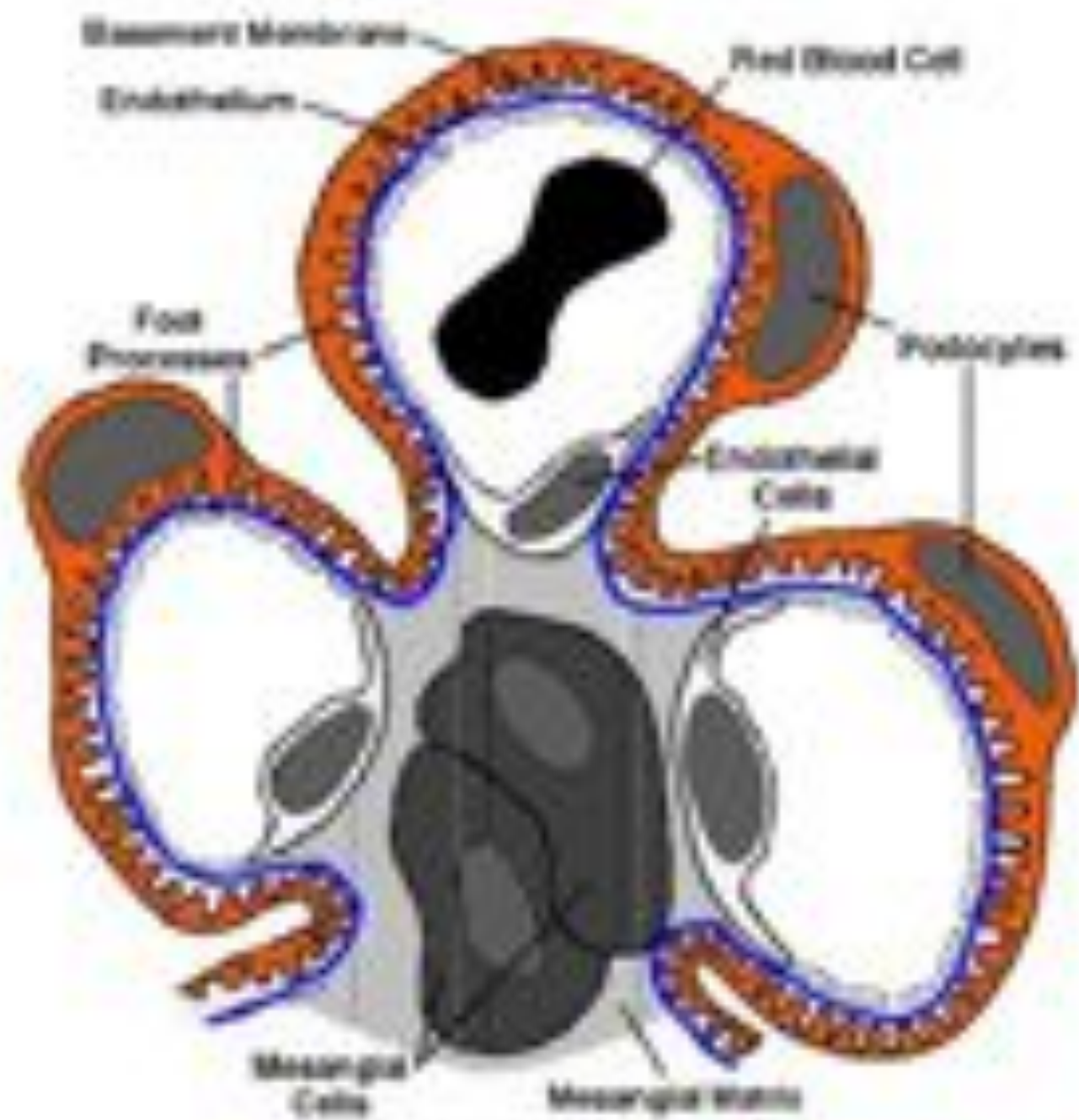


# Cutting & Staining

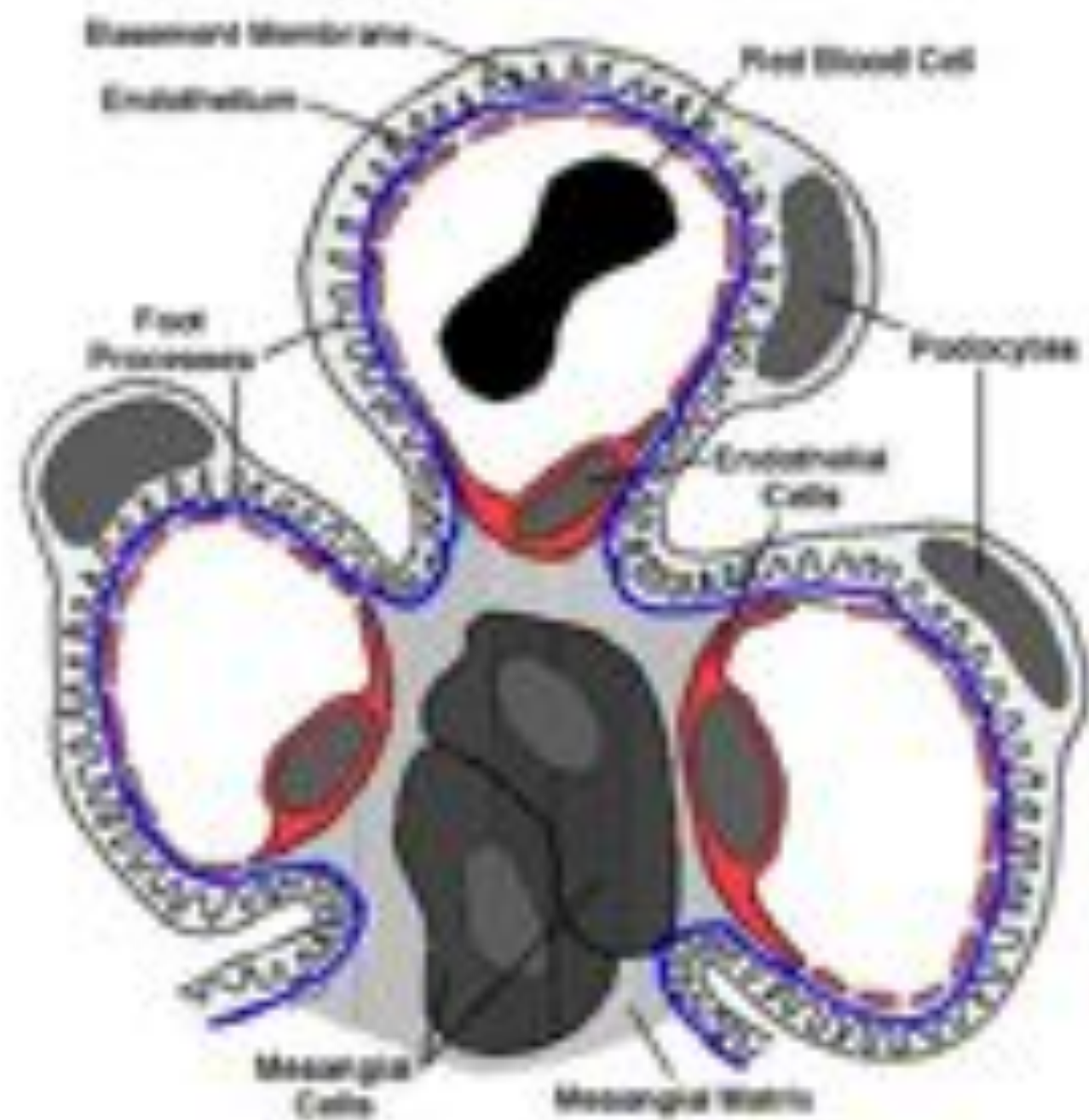


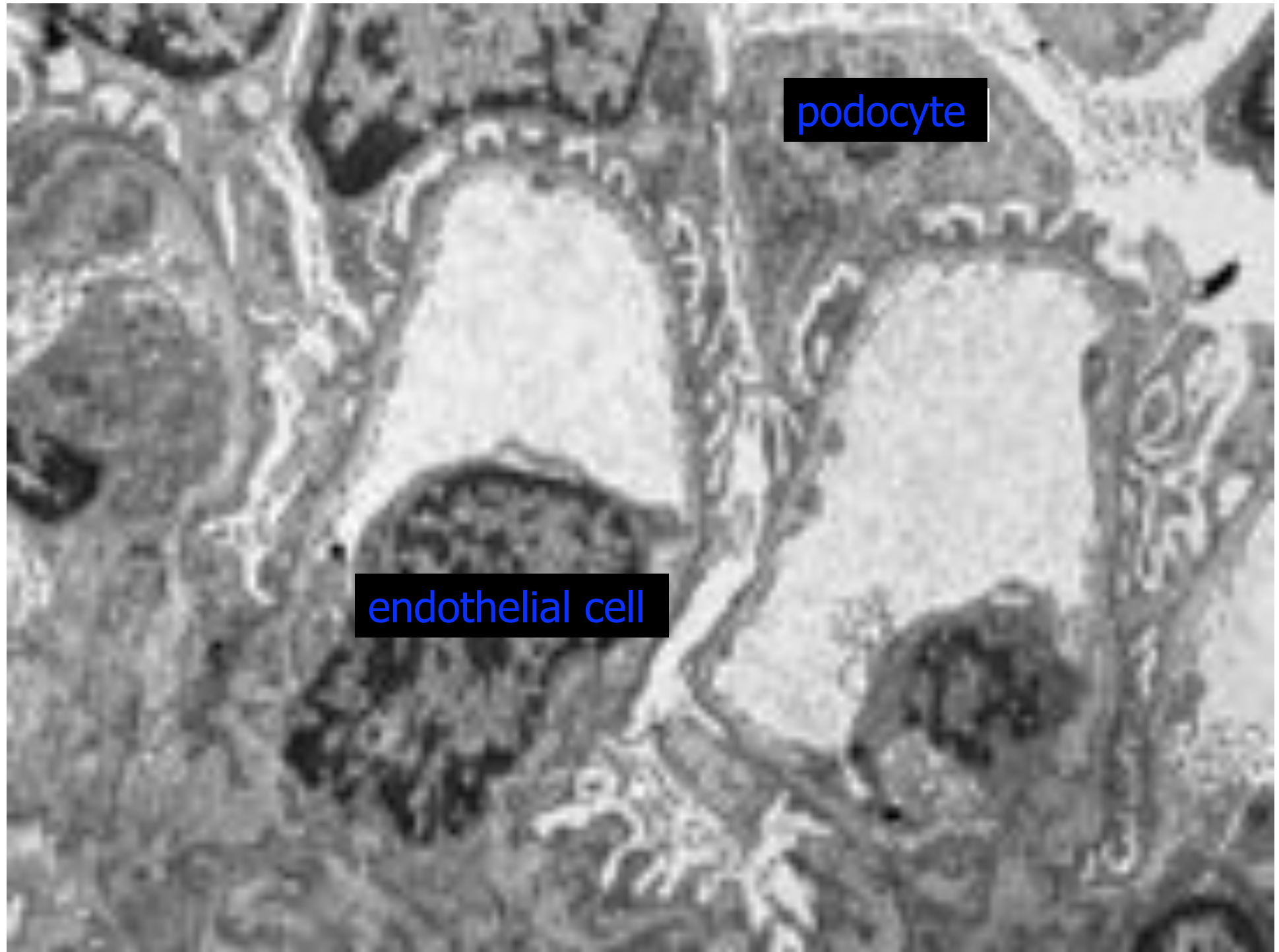








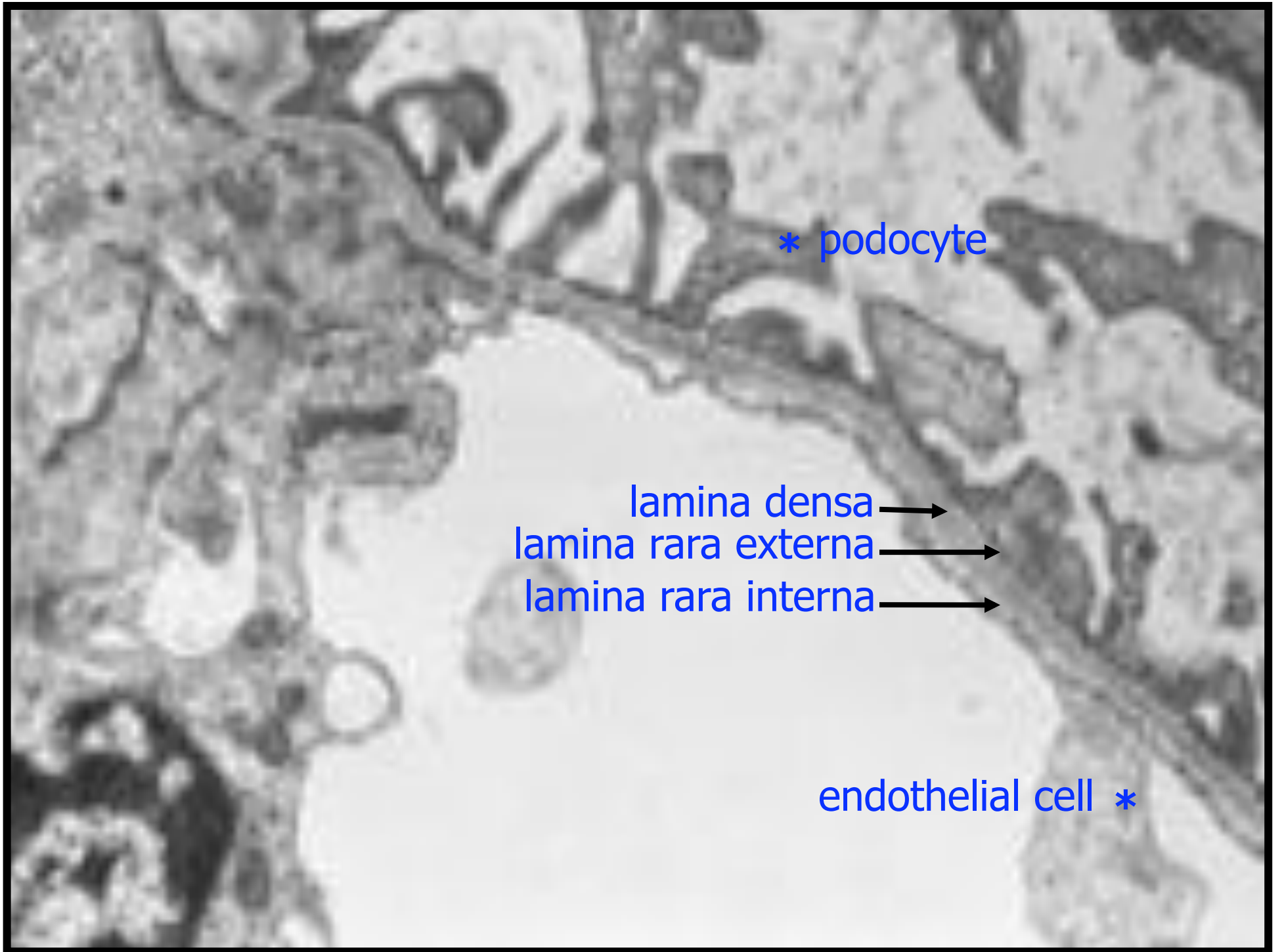




podocyte

endothelial cell





\* podocyte

lamina densa →

lamina rara externa →

lamina rara interna →

endothelial cell \*

