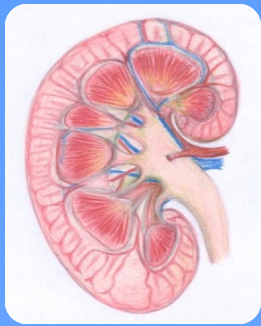


Pathology of the Renal Allograft

Students 211



Pathology of the renal allograft

Hala Kfoury Kassouf MD, KSUF, RCPA, EBP

Assistant Professor of pathology

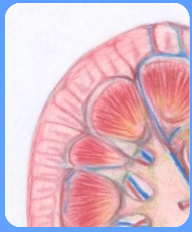
Consultant Pathologist

King Saud University

King Khaled University Hospital

These kidneys are about normal in size but have a few scattered cysts, none of which is over 2 cm in size. This is cystic change associated with chronic renal dialysis.





The Banff Classification





The Banff Classification

It is interesting to know that the fathers of transplantation were arabs.

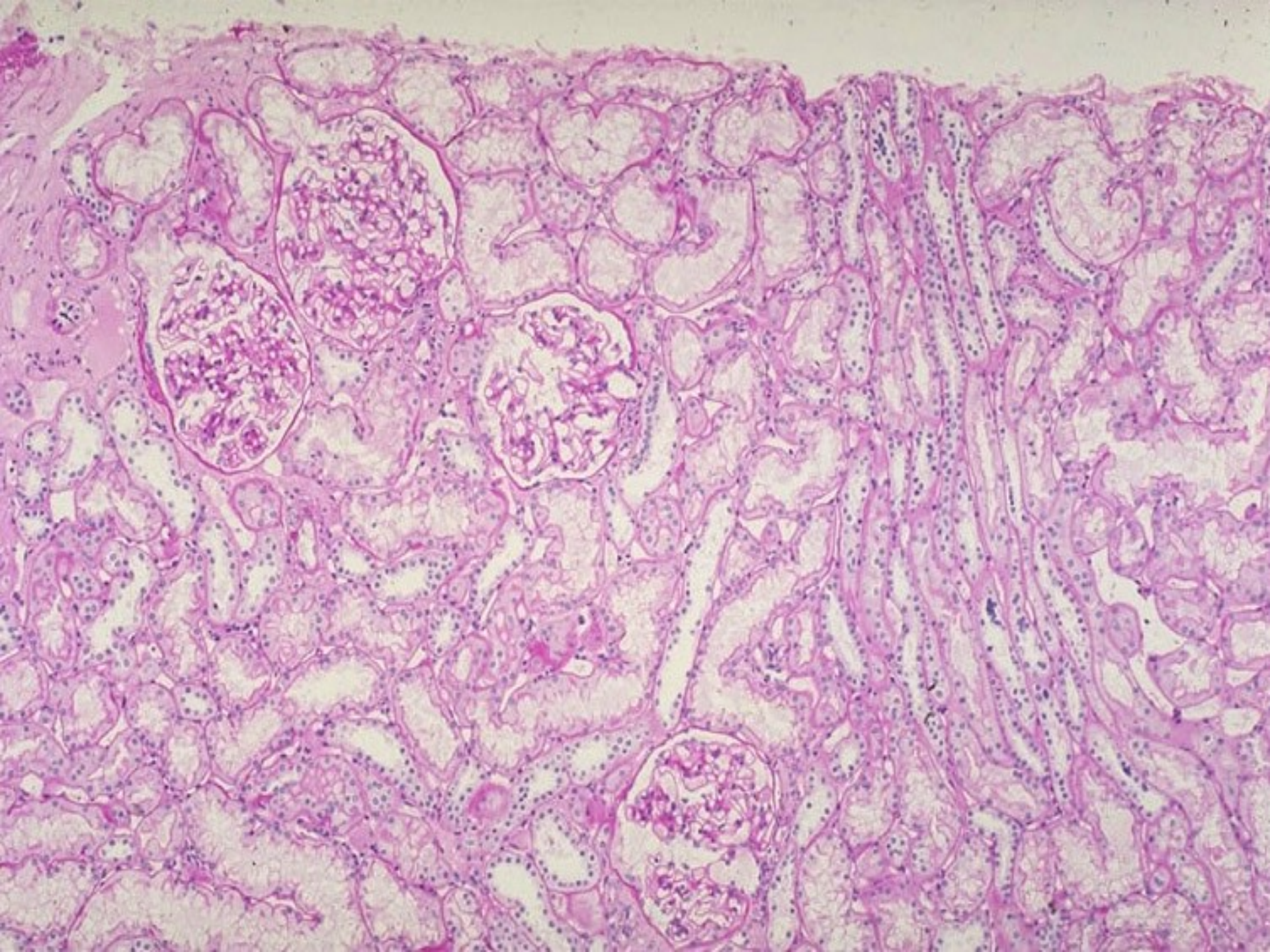
It is important to differentiate between Xeno. and Homograft.

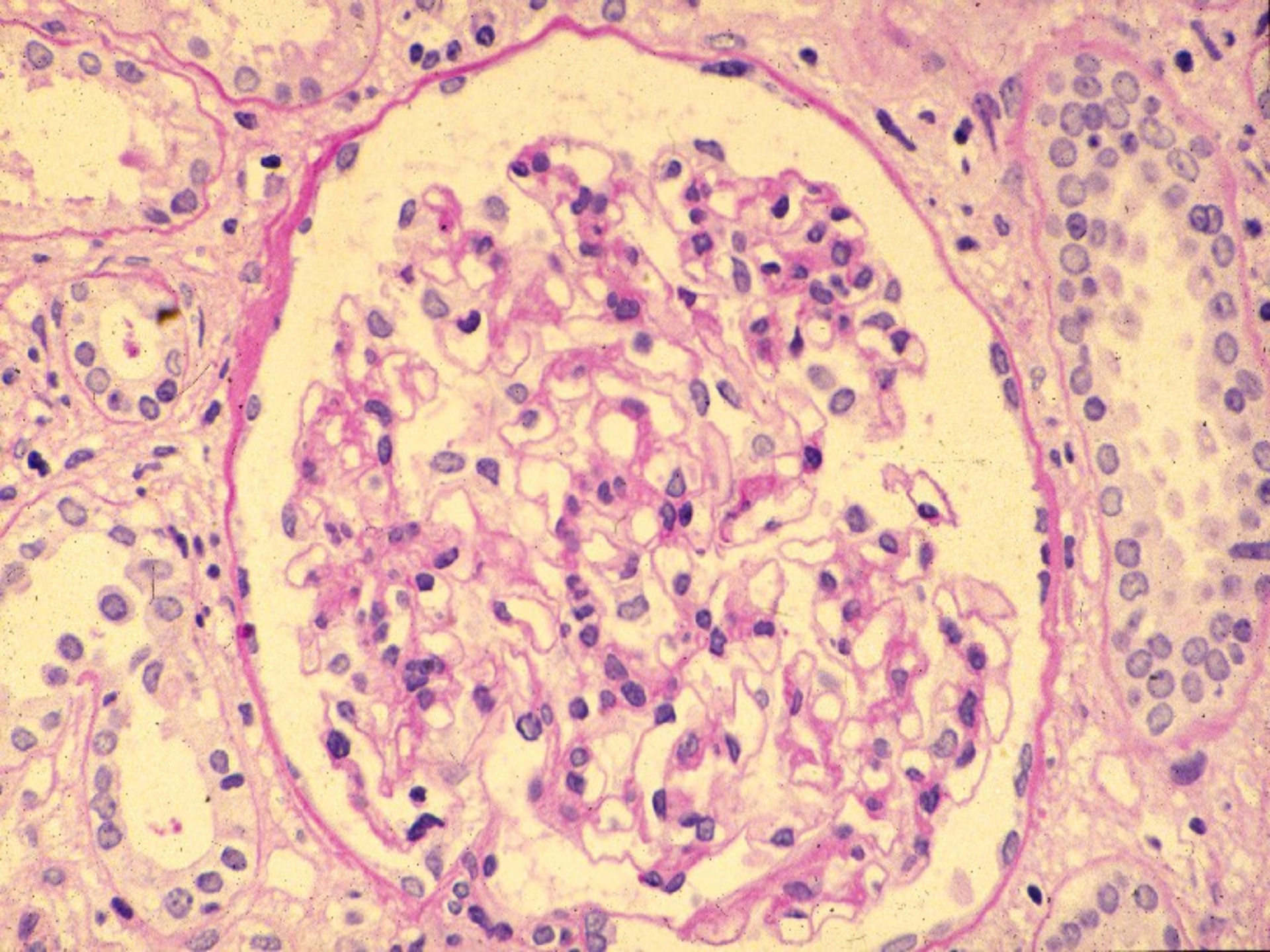
It is recognised that low toxicity protocols are now under investigation to be able to replace the aggressive immunosuppressive protocols.

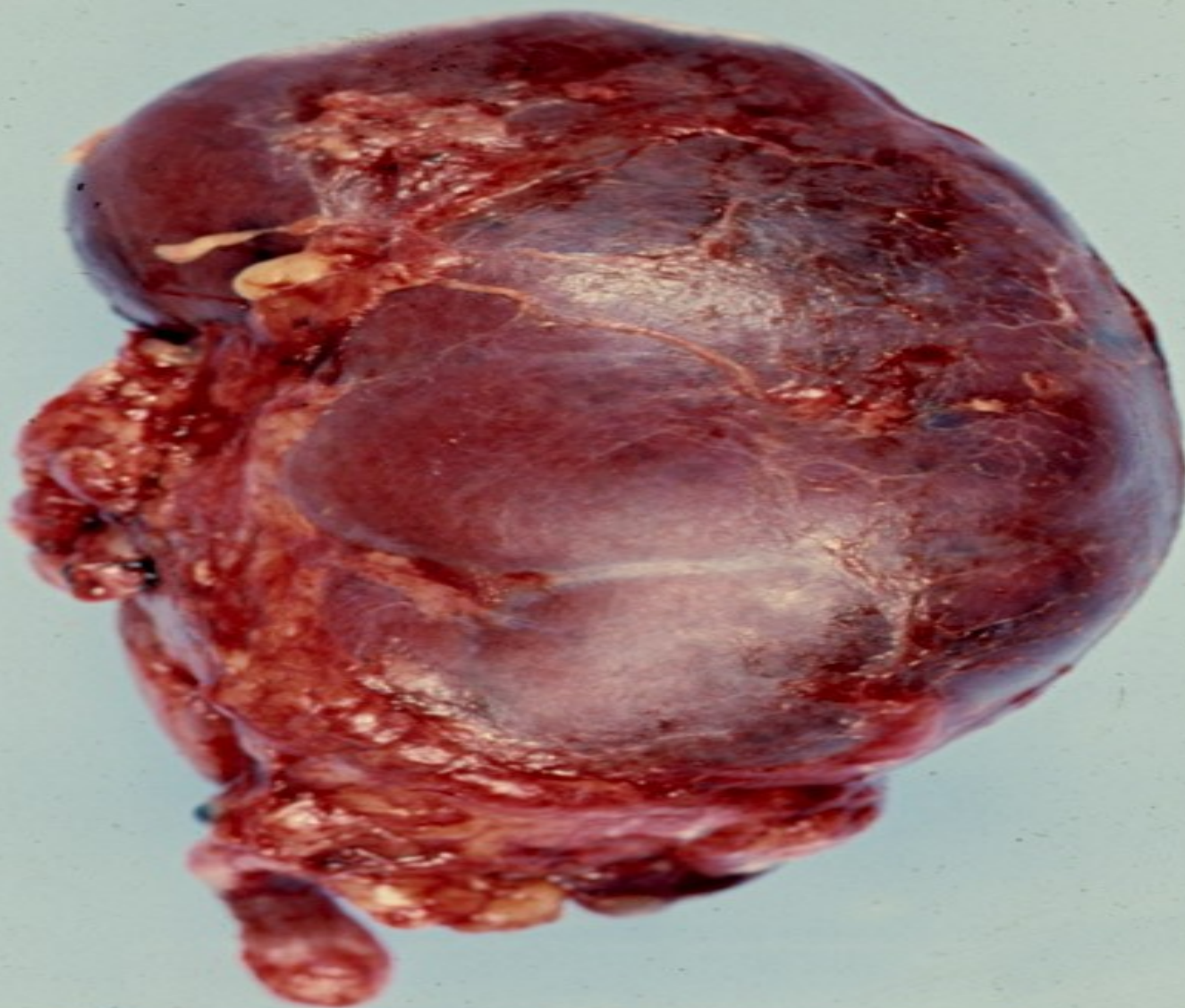
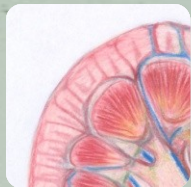


The Banff classification: diagnostic categories

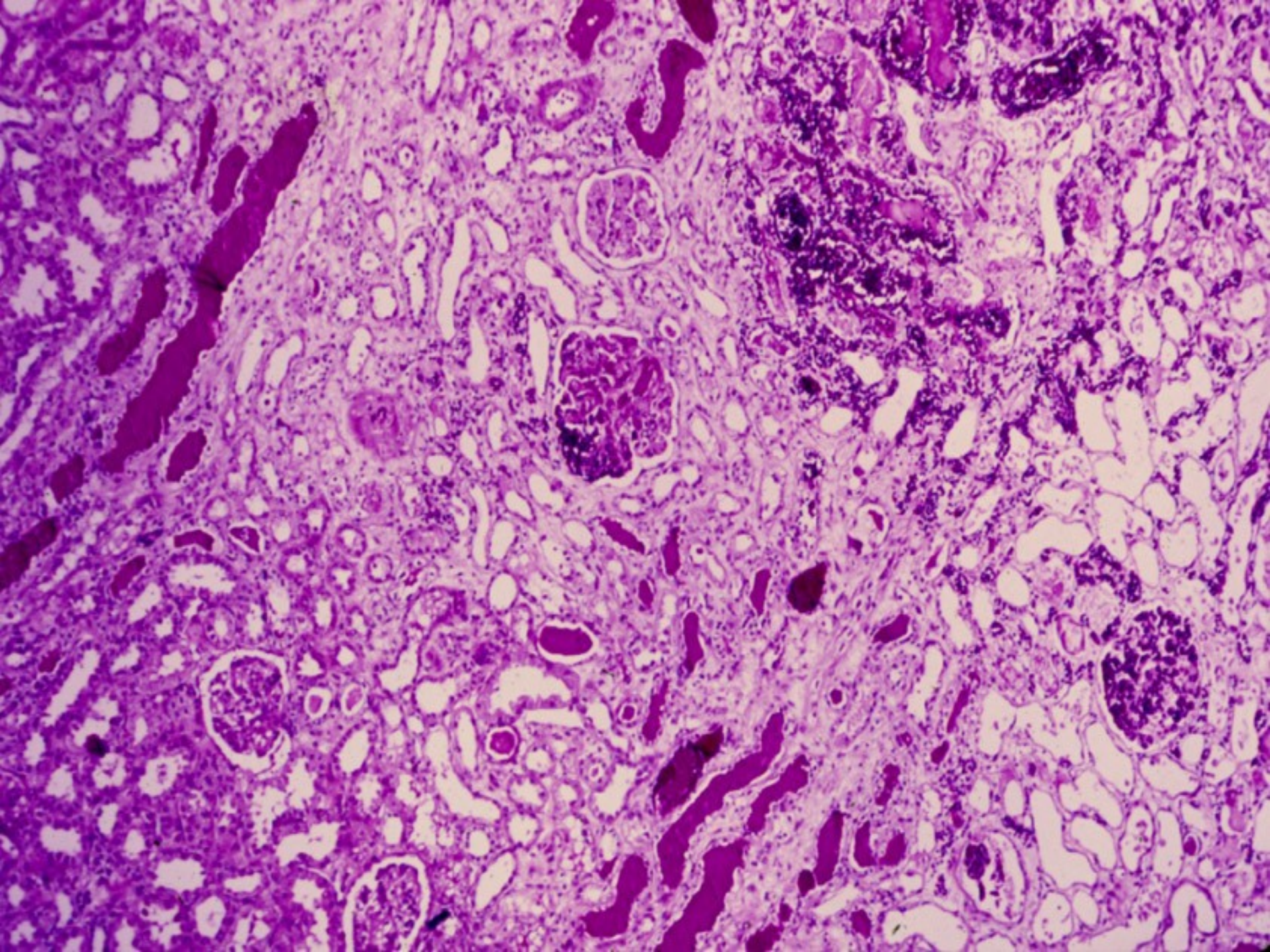
- Normal
- Hyperacute Rejection
- Borderline changes (“very mild acute rejection”)
- Acute Rejection(Tcell, Antibody-mediated)
- Chronic Rejection
- Others

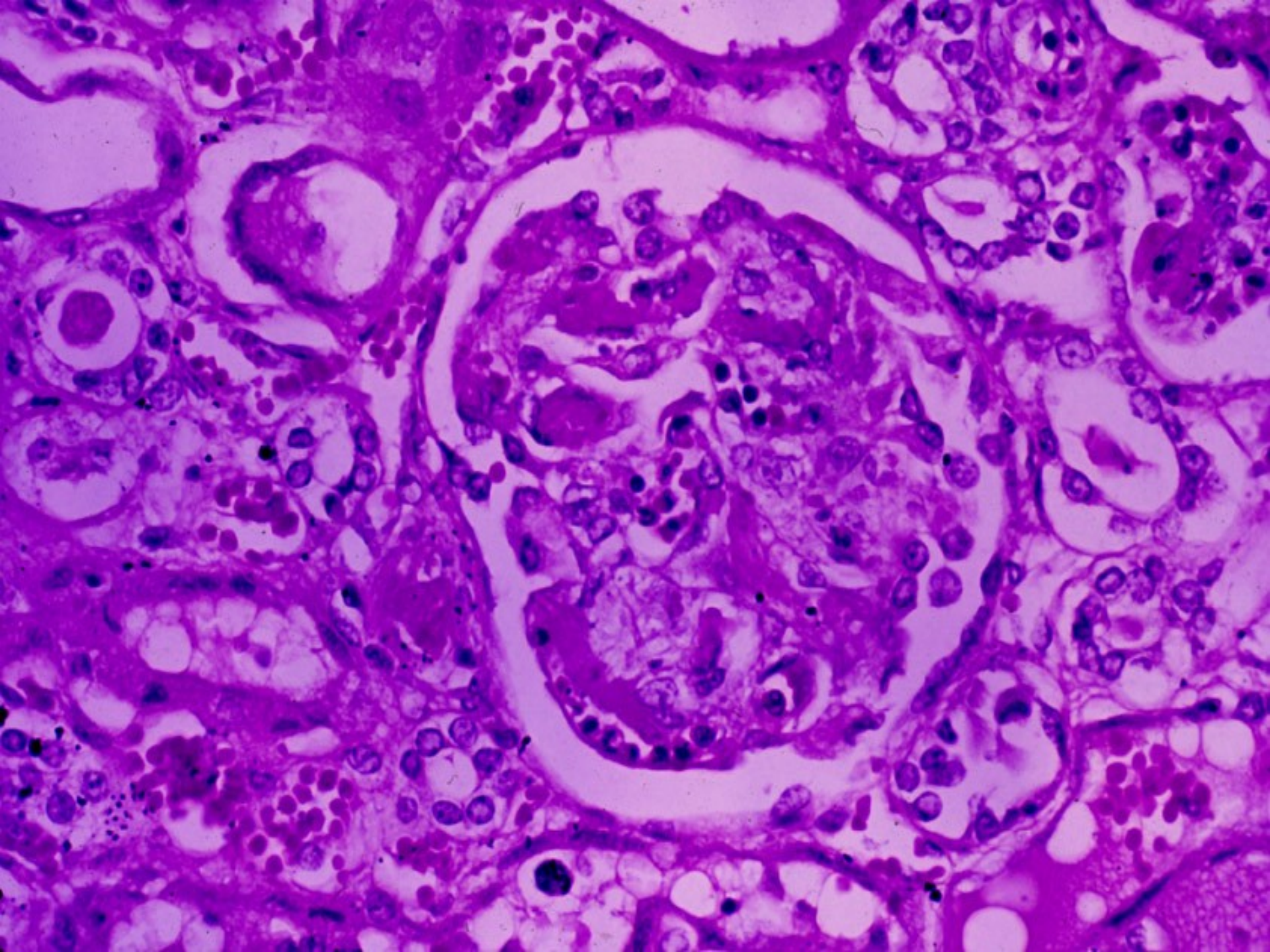


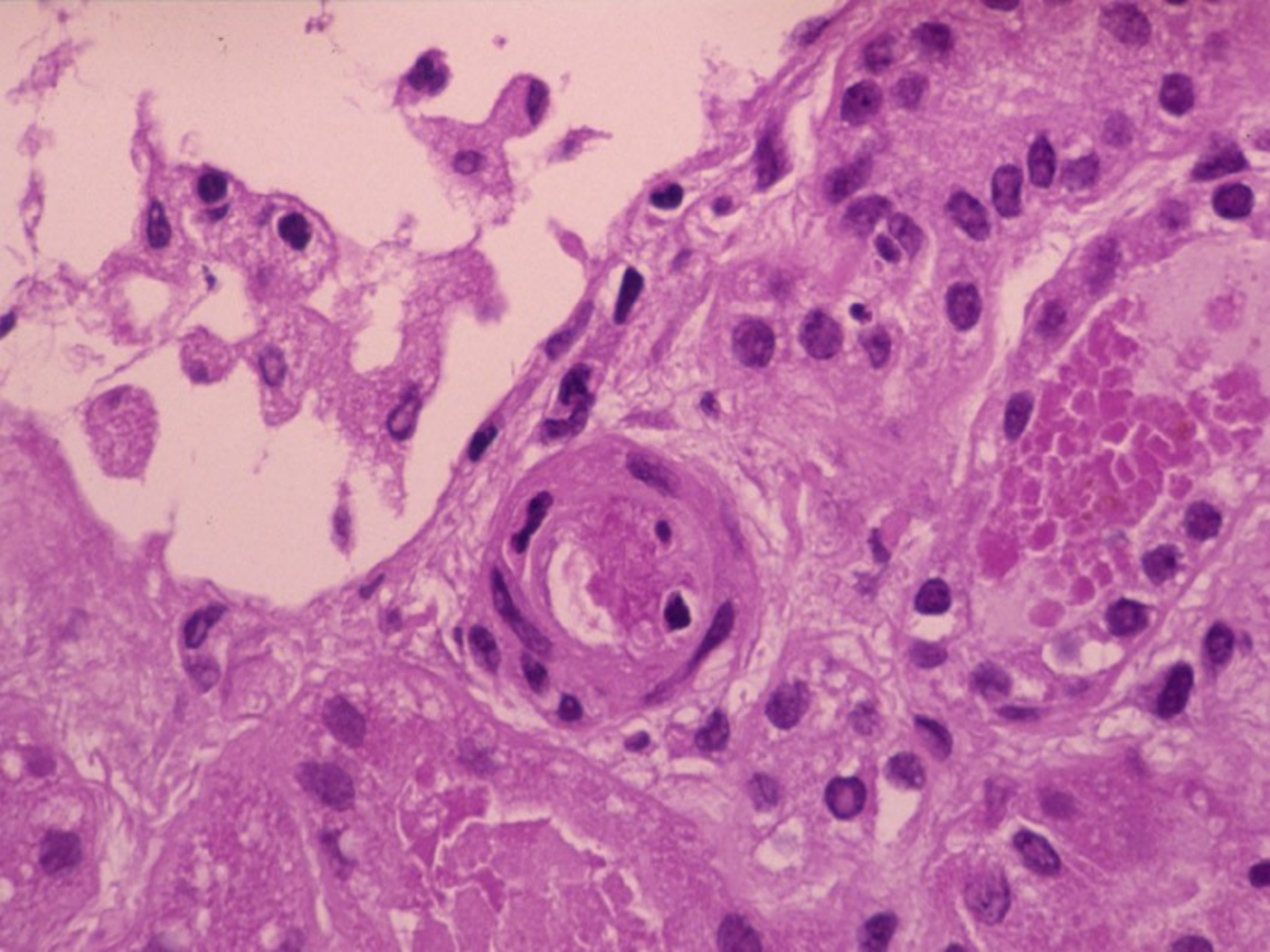


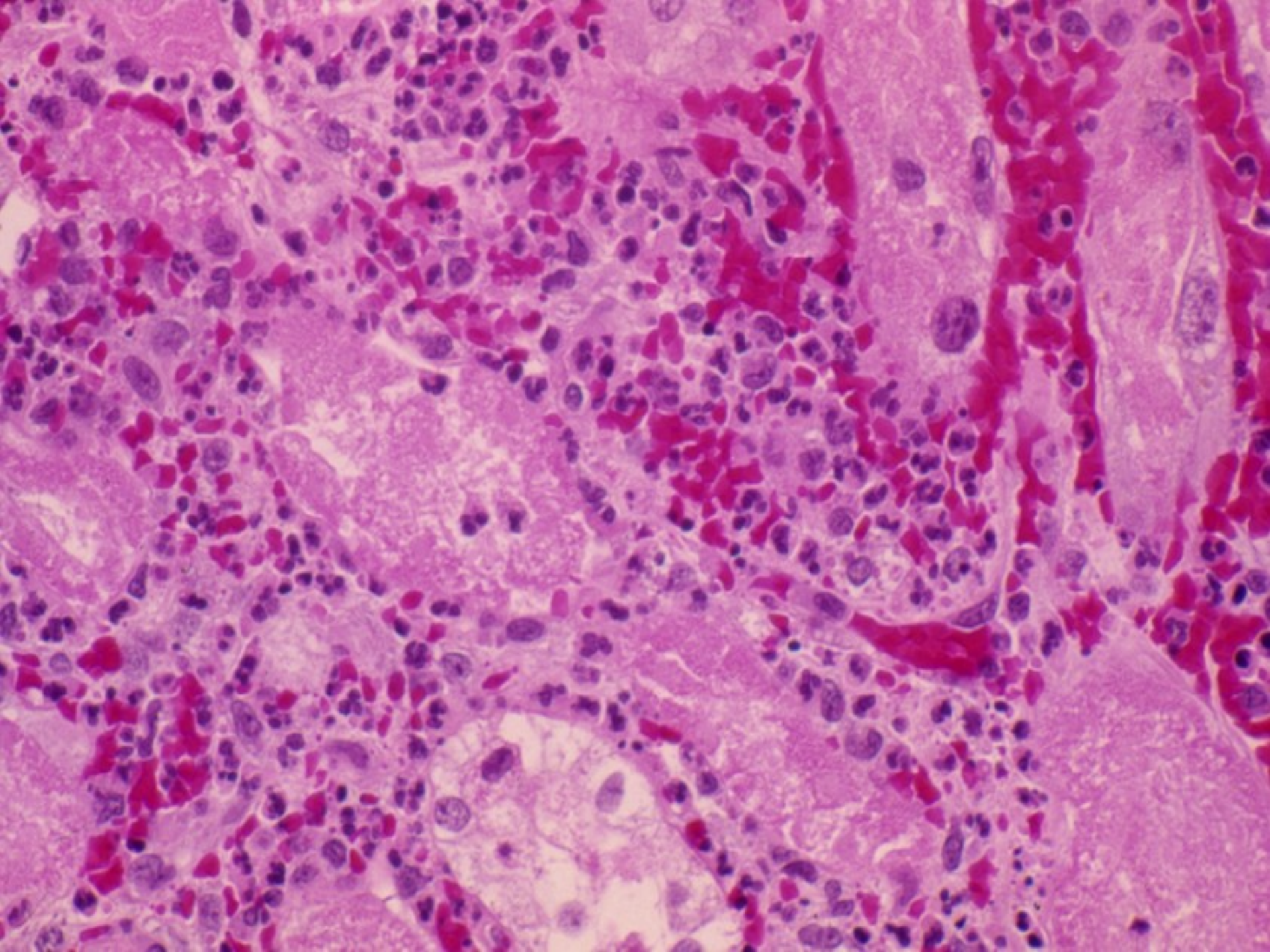


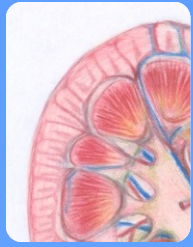
cm 1 2 3 4 5 6 7 8 9 10
SPECIMEN S-27-5847 4 DATE 5/25/77











Pathology of the renal allograft

- Donor- reactive alloantibodies.
- C4d. (Feucht)



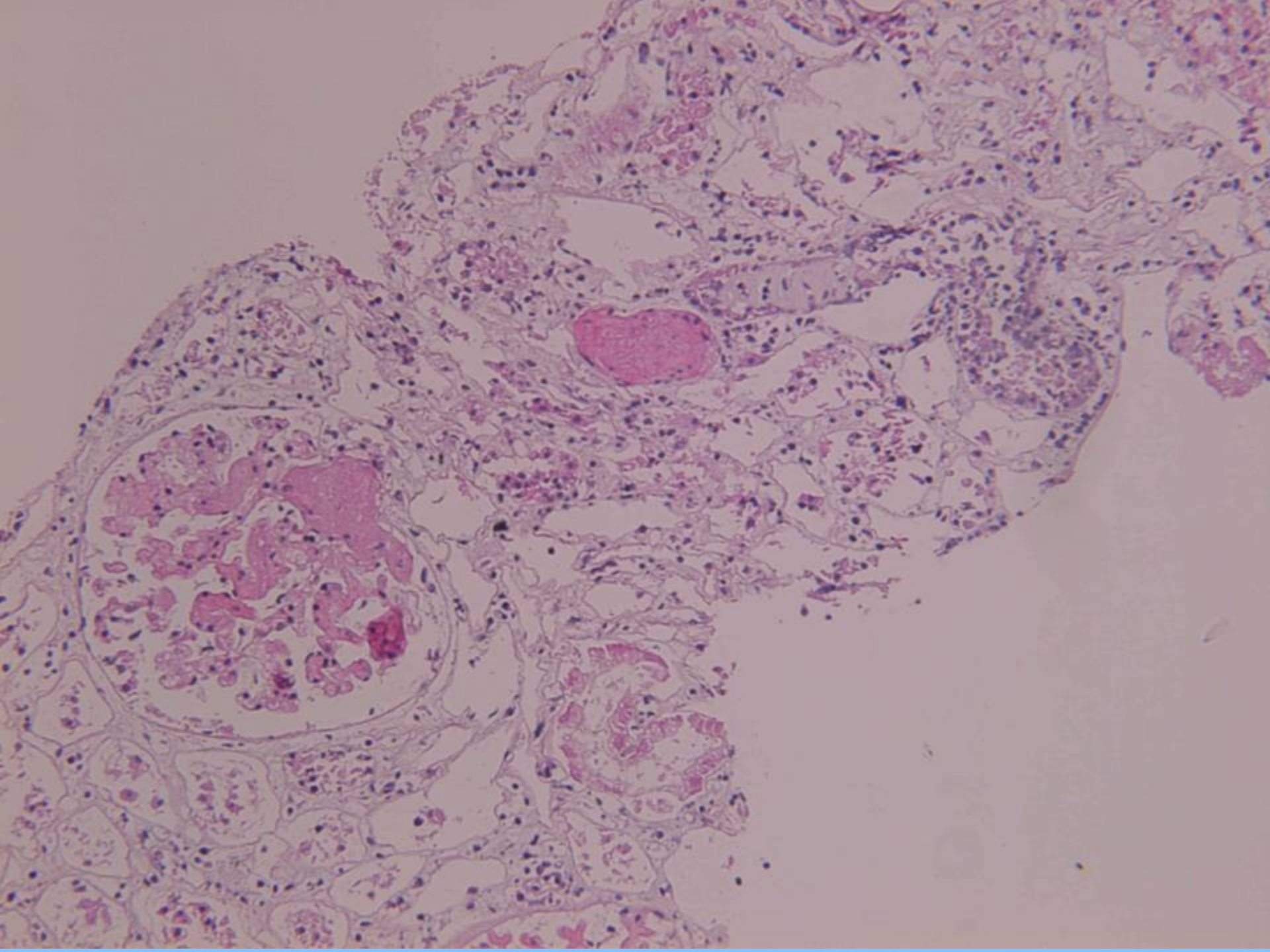
Pathology of the renal allograft

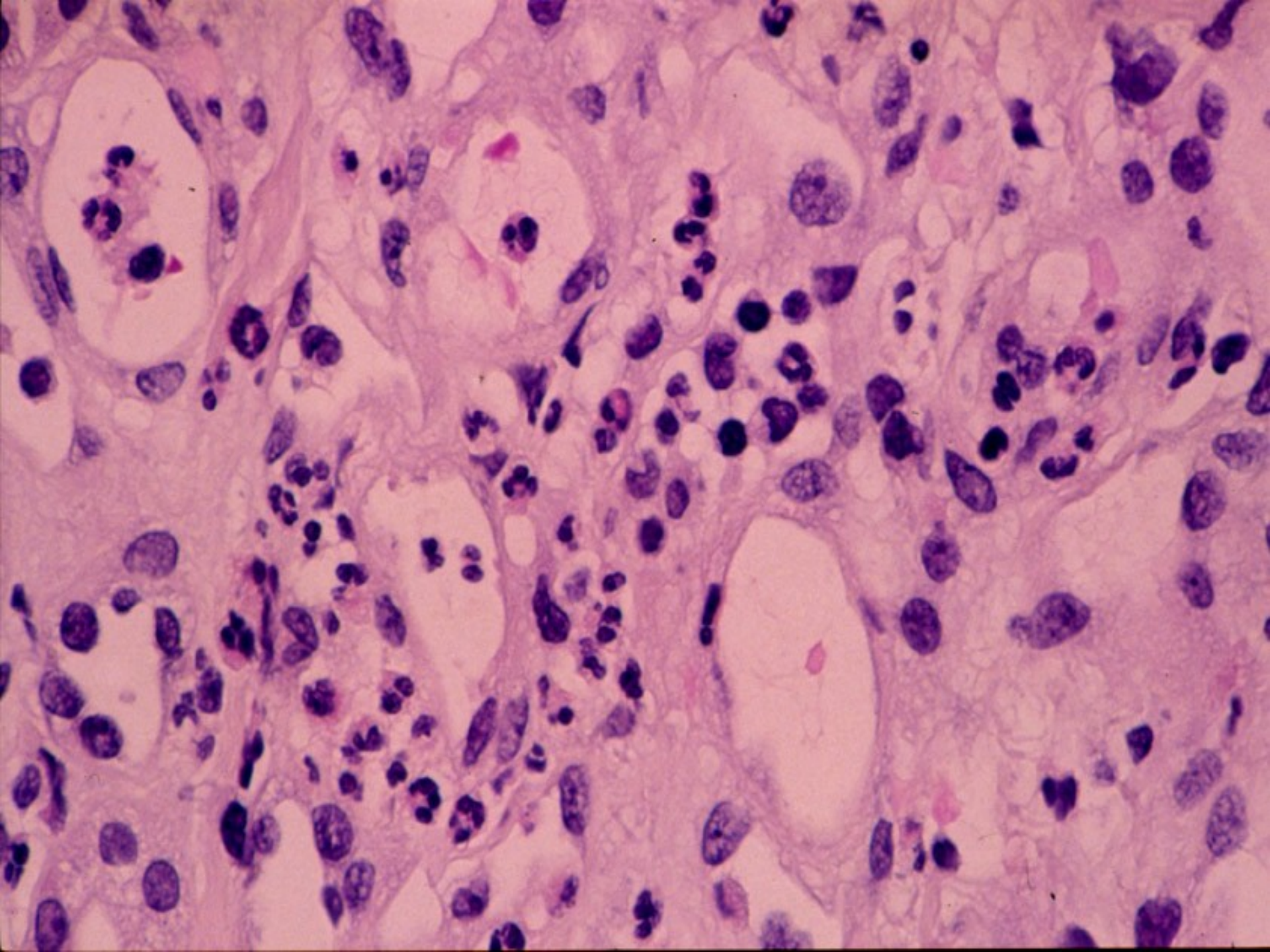
Antibody-mediated Rejection can cause other than

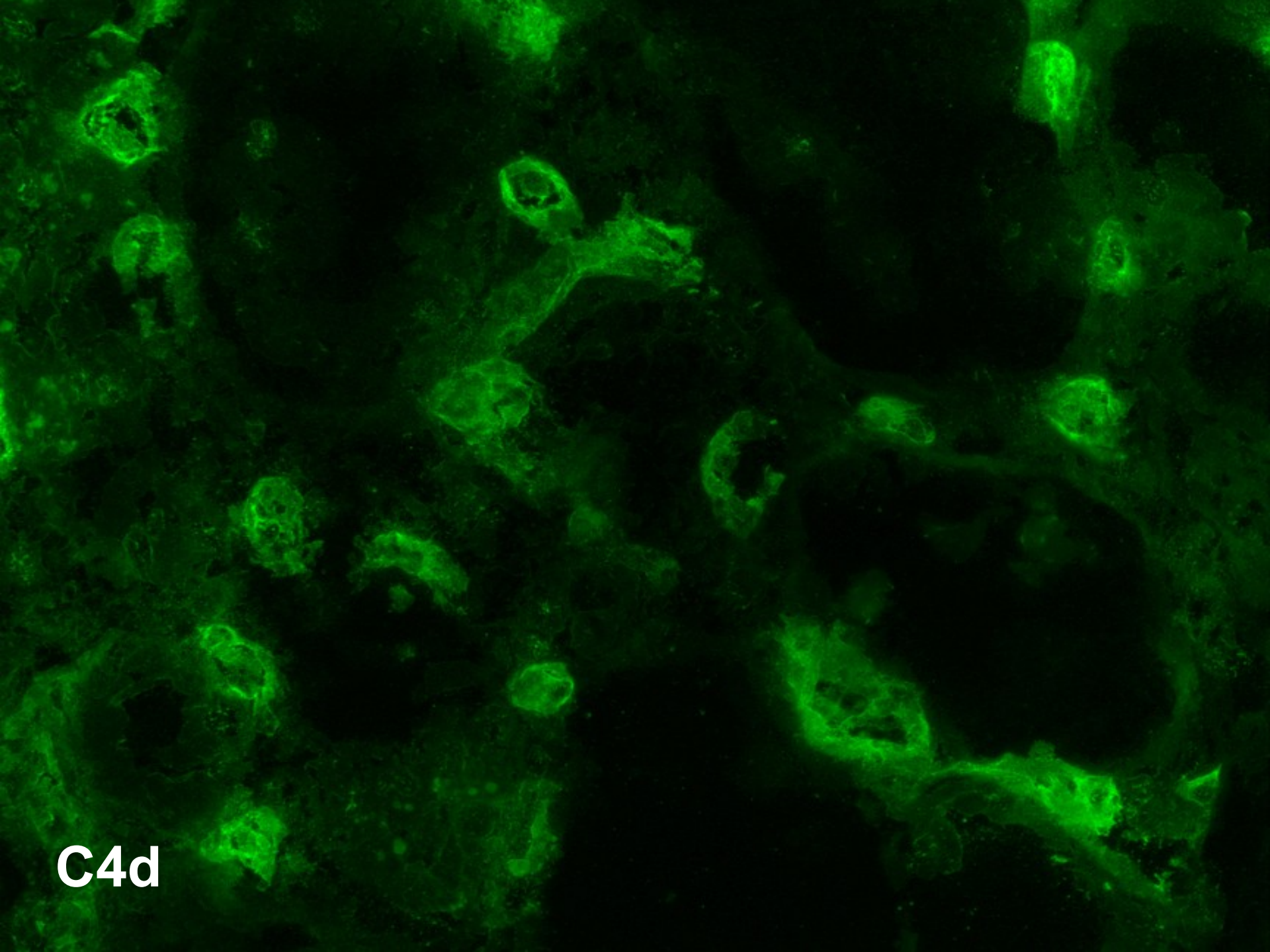
Hyperacute Rejection.

Acute Rejection.(Early alloantibody mediated rejection).

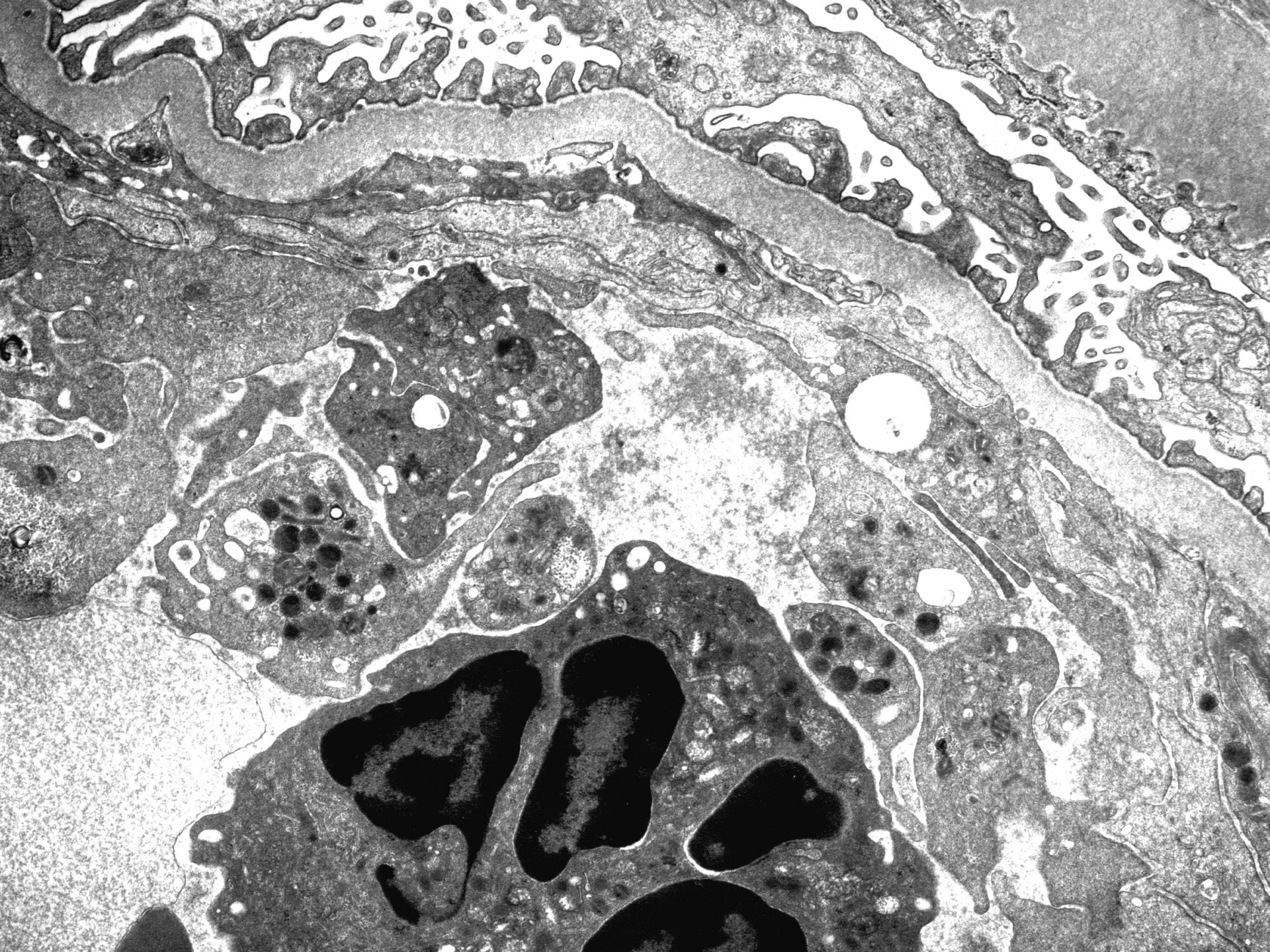
Chronic Rejection.(Late alloantibody mediated rejection).





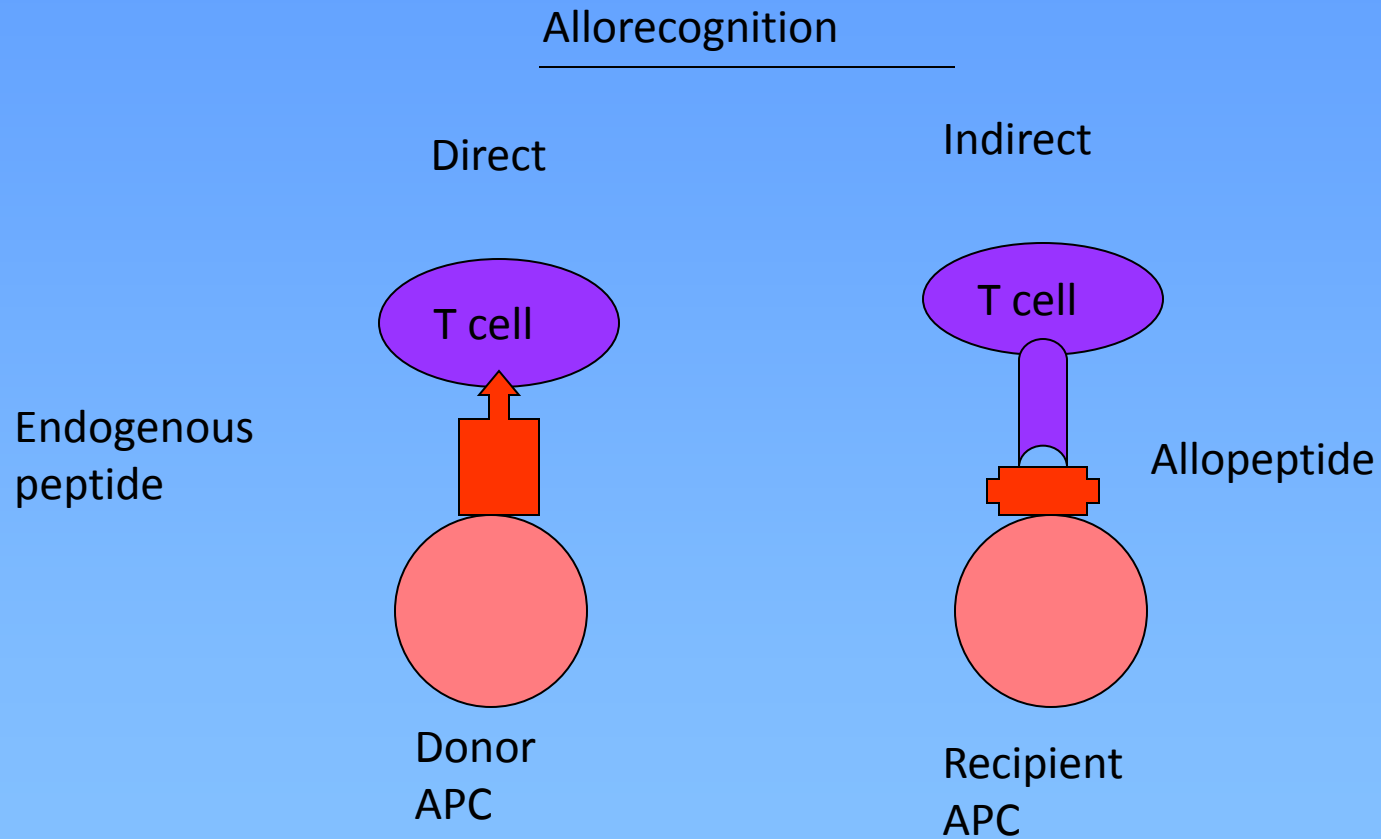


C4d

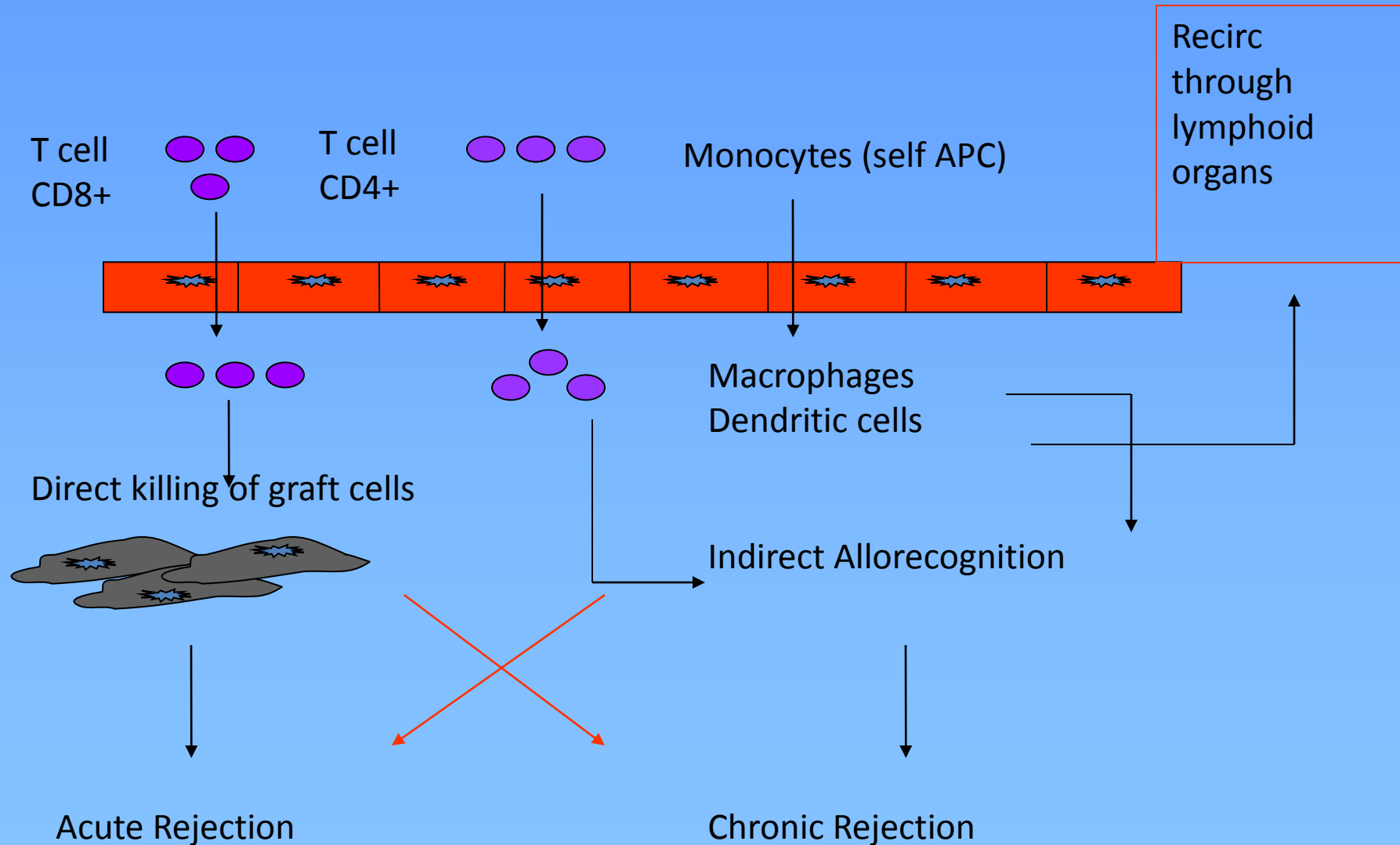




The Banff classification



The Banff classification





The Banff classification

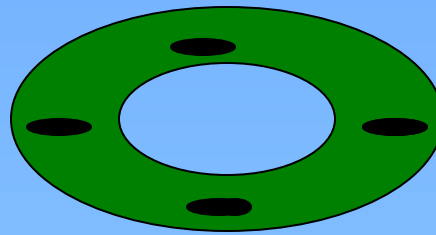
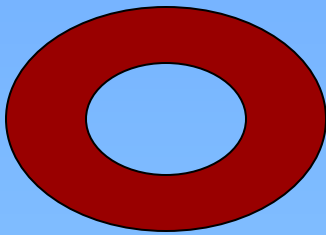
The Goals :

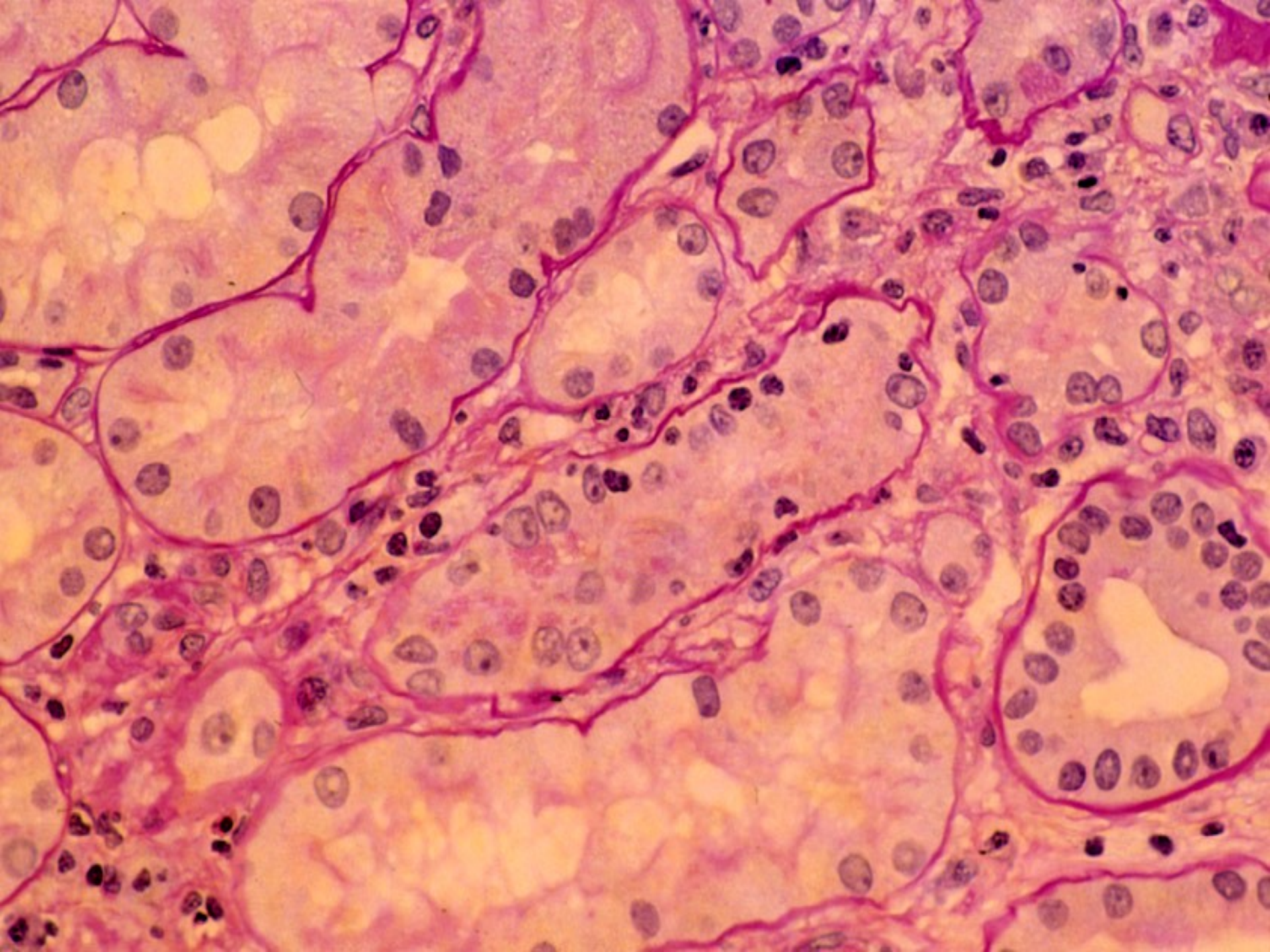
- Practical to implement and easy to describe to unfamiliar personnel.
- It must be reproducible
- The sensitivity and specificity rates should be high to ensure that +&- Dx are accurately diagnosed.
- The system should be clinically informative.



The Banff classification

- Borderline changes(Suspicious for Acute Rejection)

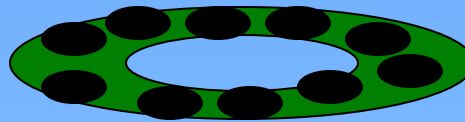
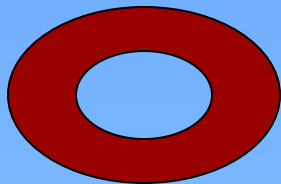




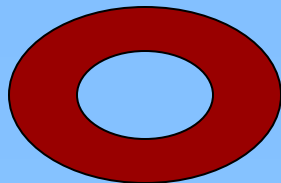


The Banff classification

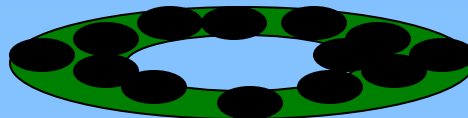
- Grade I A :→ Mononuclear interstitial inflammation(>25%).
→ + Moderate tubulitis.(5 to 10)

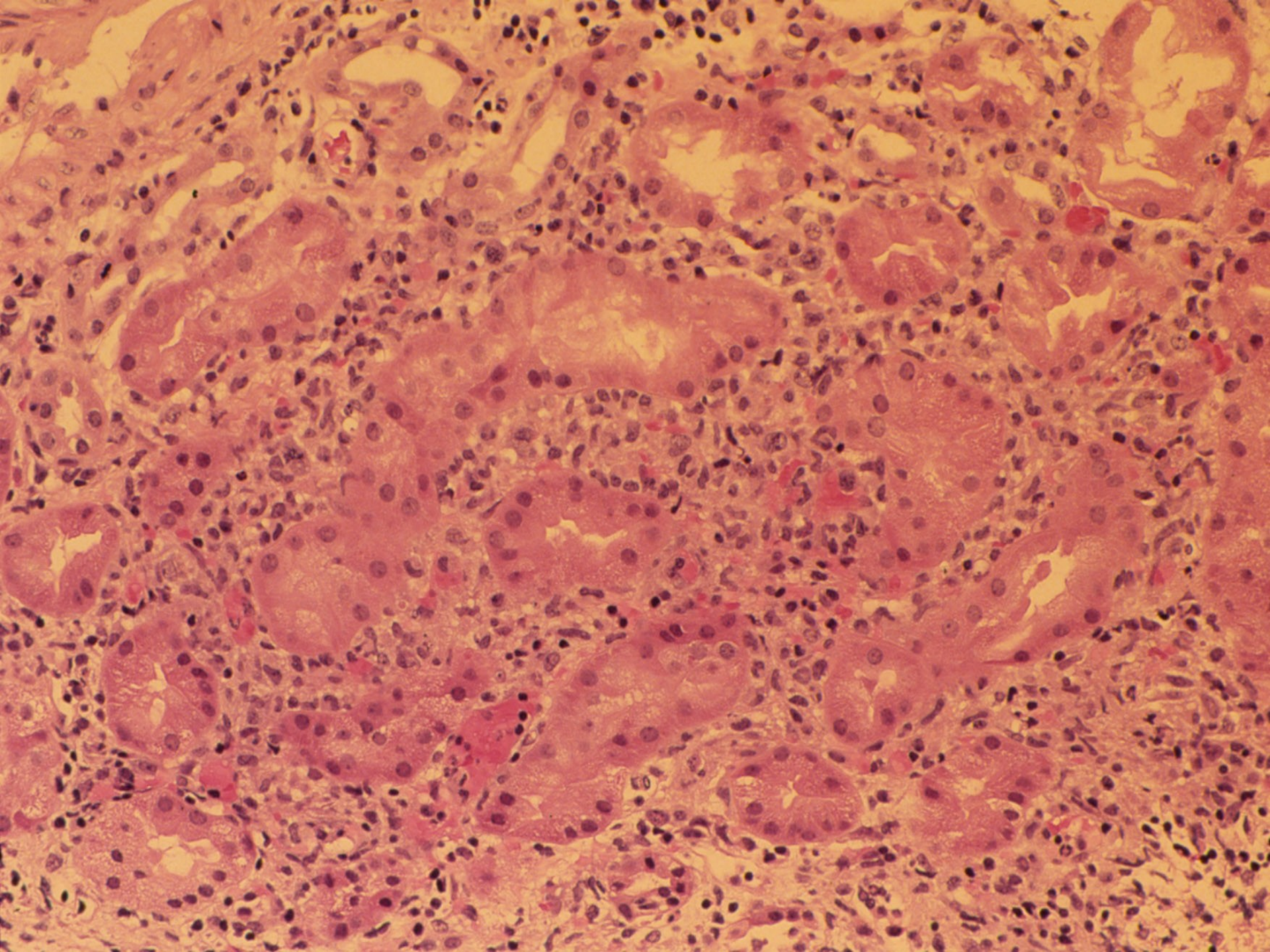


- Grade I B :→ Mononuclear interstitial inflammation(>25%)



→ + Severe tubulitis(>10)

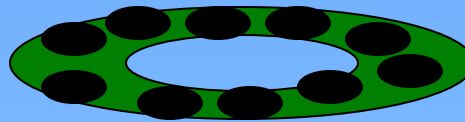
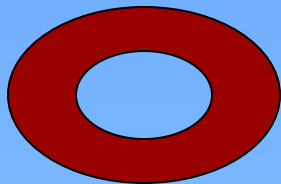




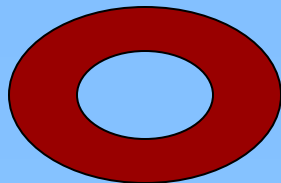


The Banff classification

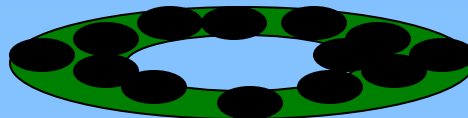
- Grade I A :→ Mononuclear interstitial inflammation(>25%).
→ + Moderate tubulitis.(5 to 10)

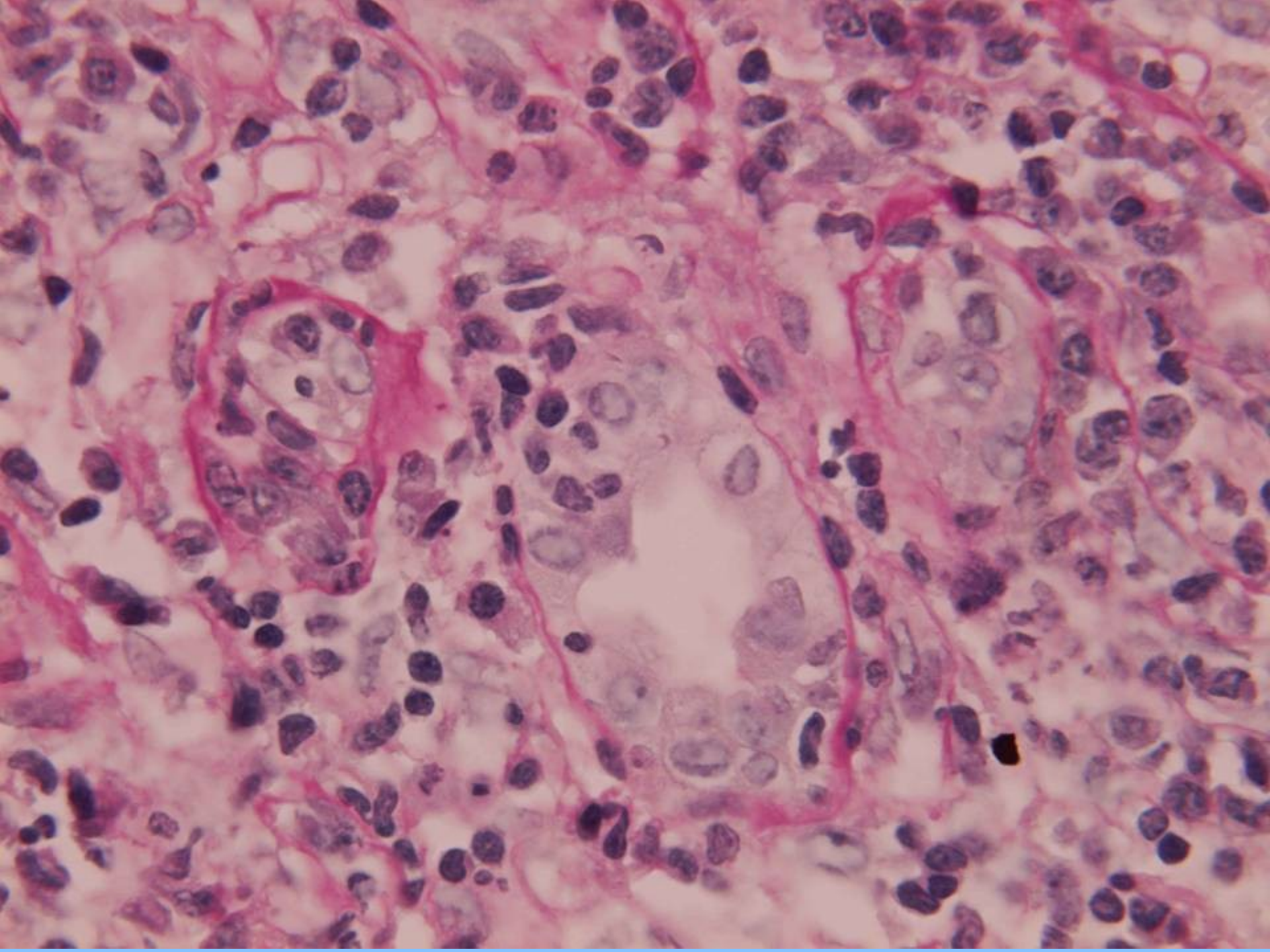


- Grade I B :→ Mononuclear interstitial inflammation(>25%)



→ + Severe tubulitis(>10)



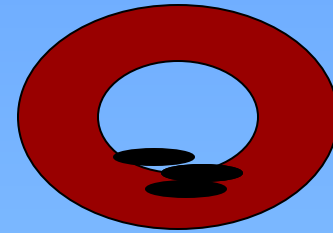




The Banff classification

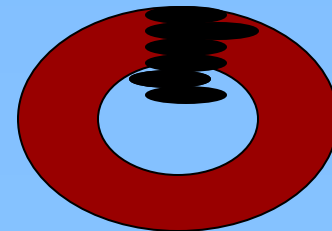
- Grade II A

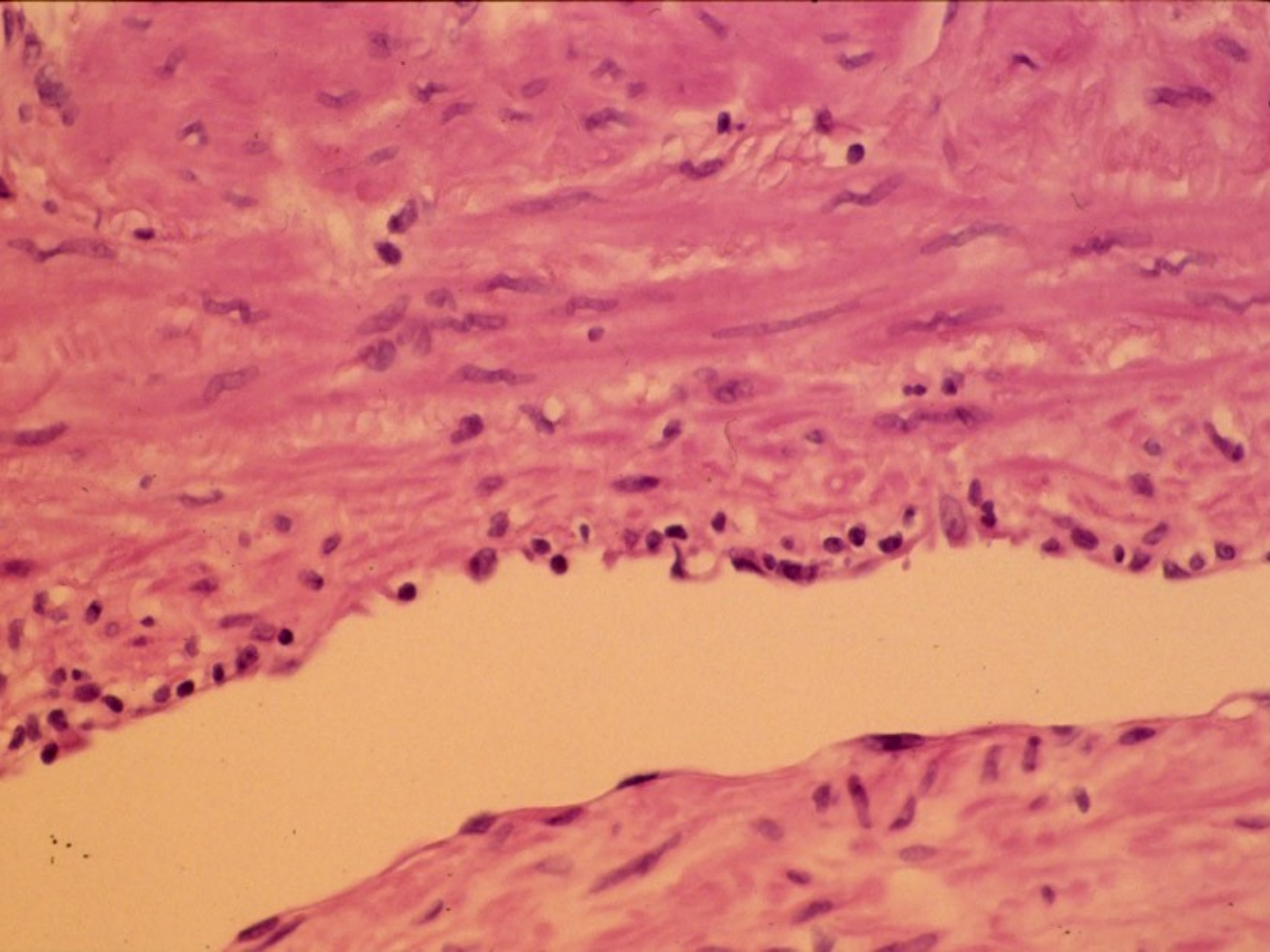
Mild to Moderate intimal arteritis :



- Grade II B

Severe intimal arteritis

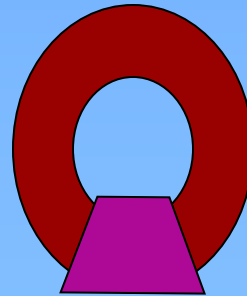
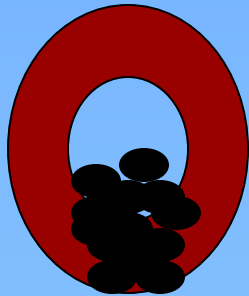


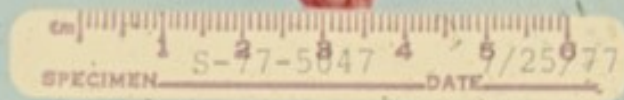
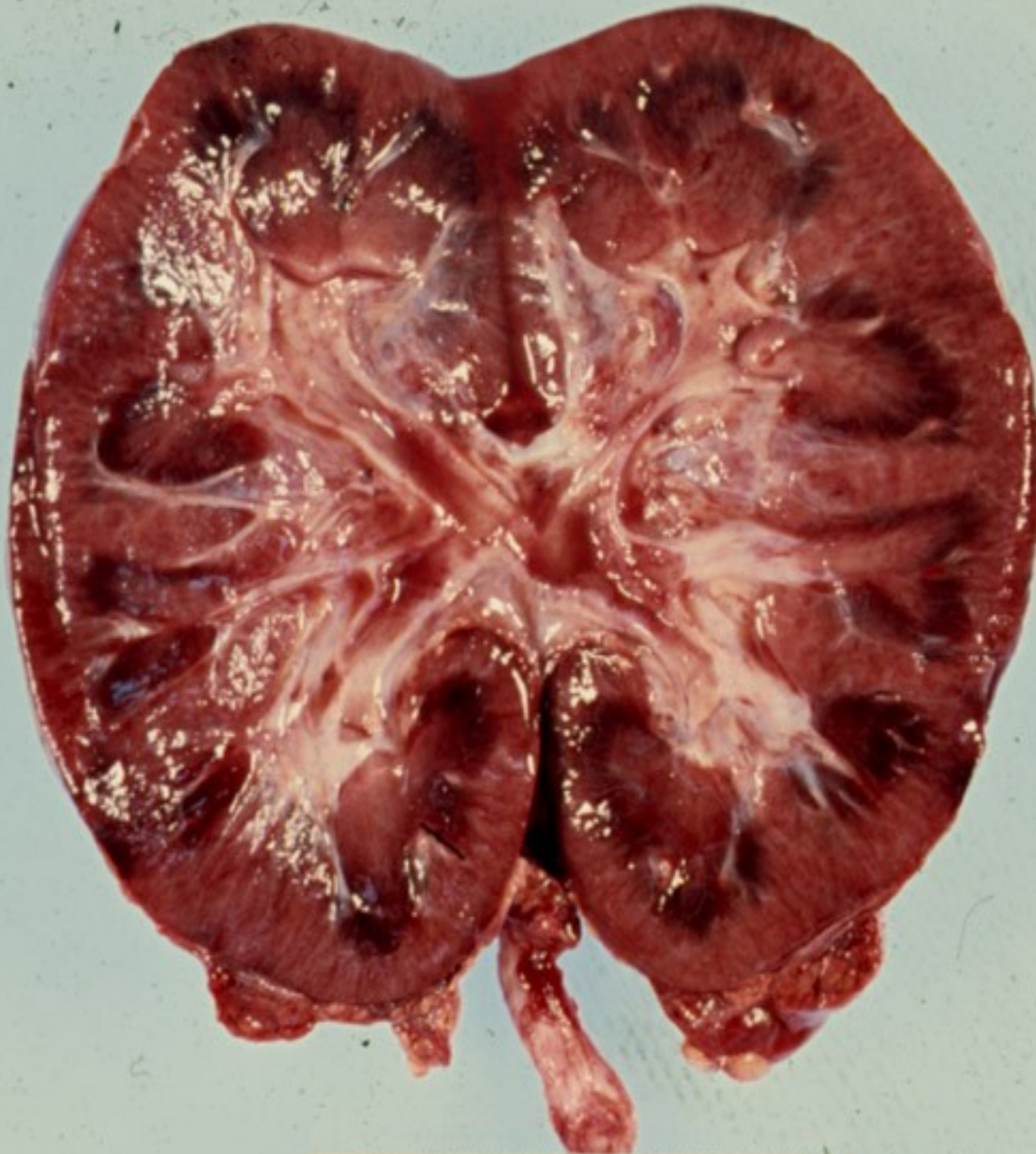


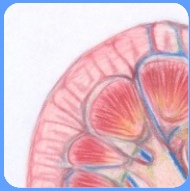


The Banff classification

- Grade III → Transmural arteritis and/or fibrinoid necrosis.



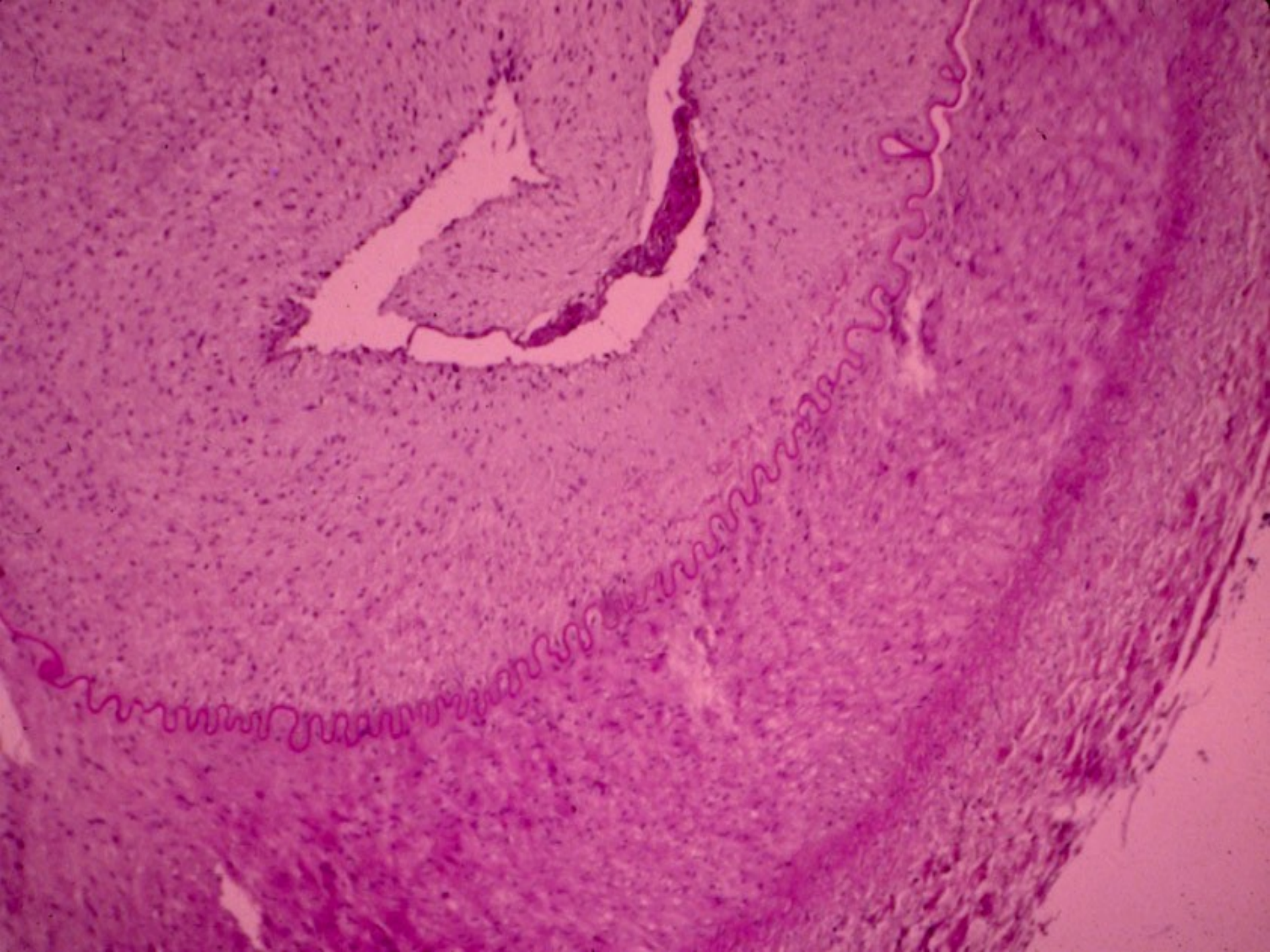


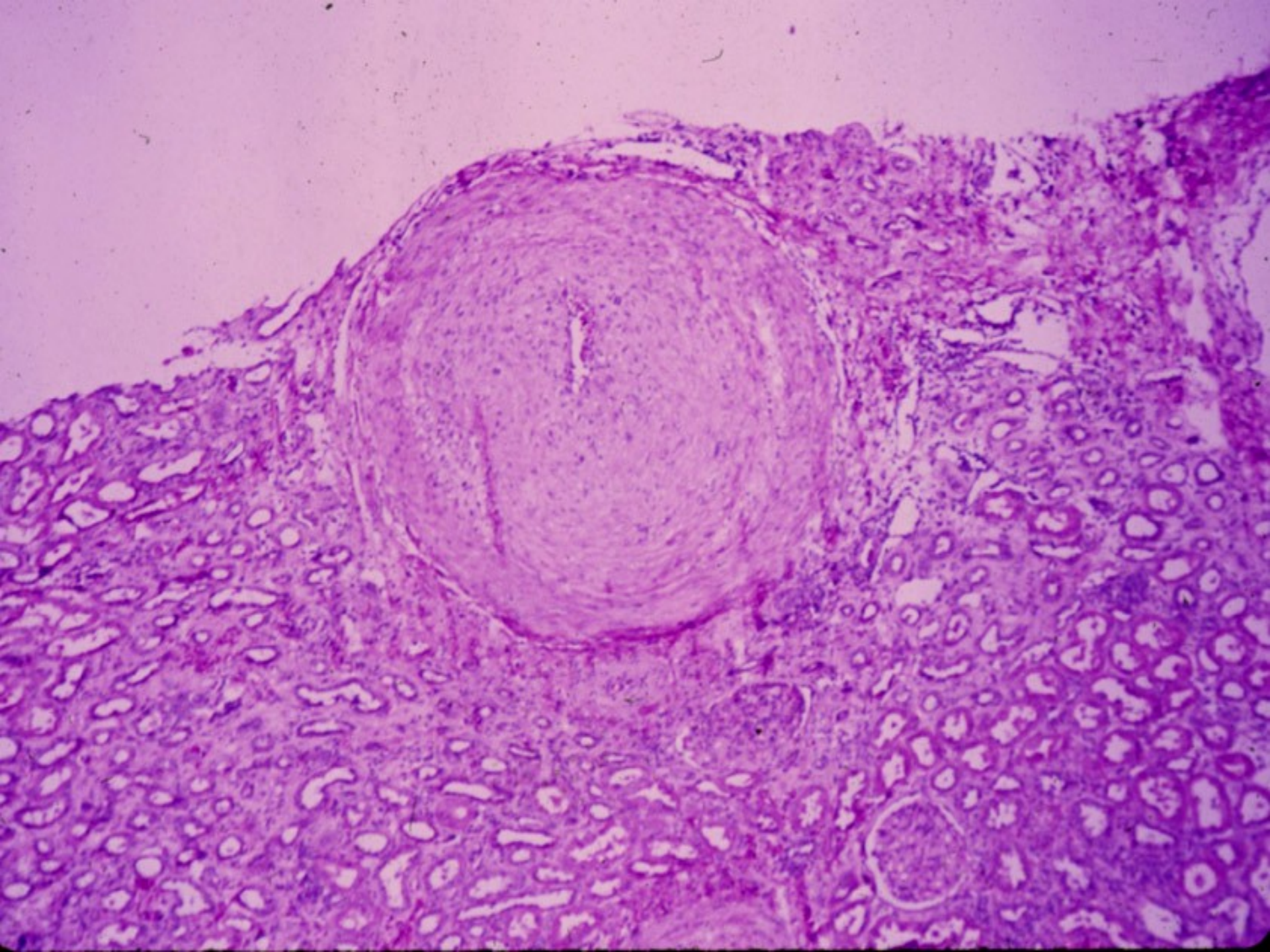


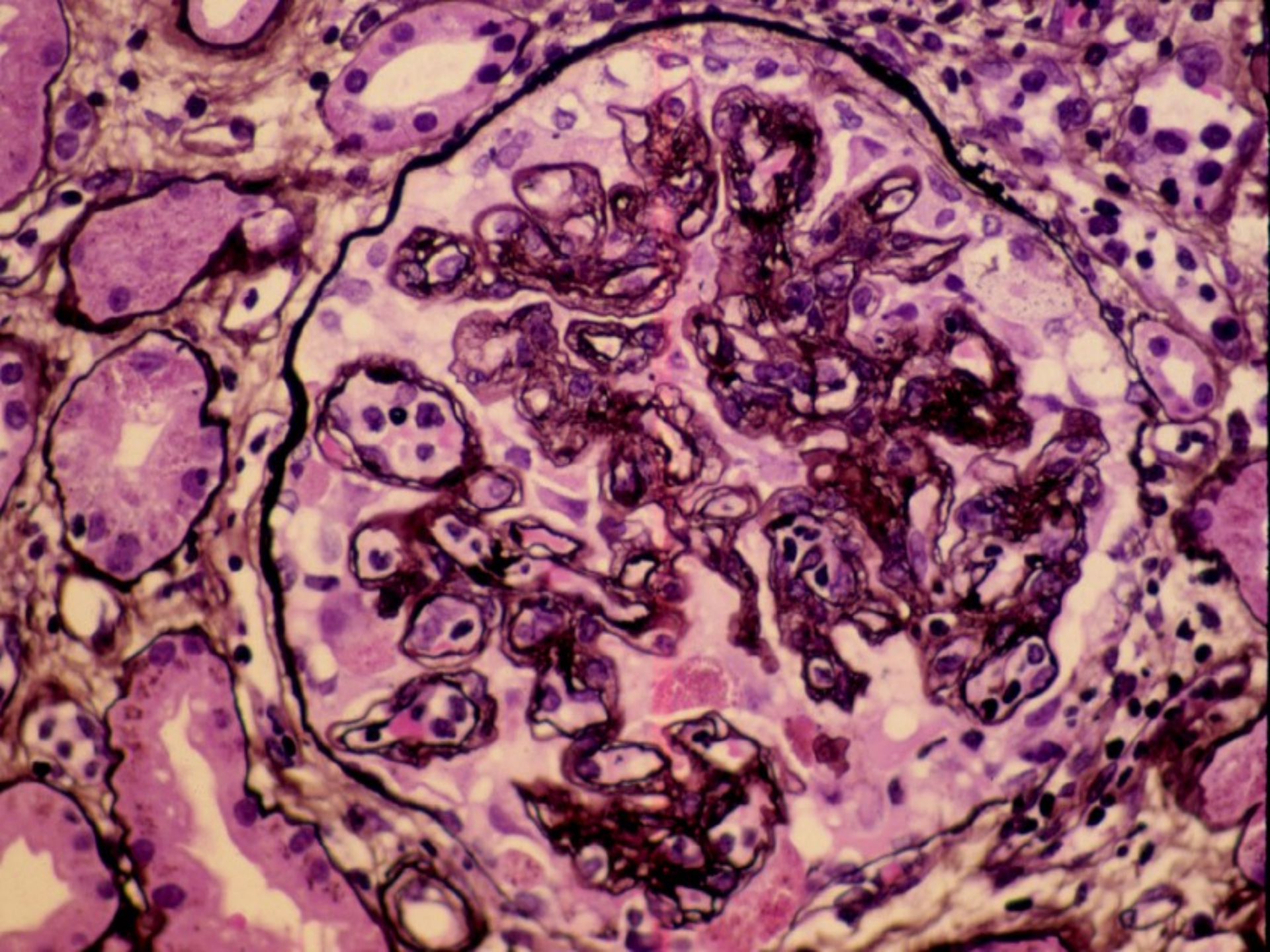
The Banff classification

Chronic Allograft Nephropathy:

- Grade I (Mild)
- Grade II (Moderate)
- Grade III (Severe)









The Banff classification

Others :

- PTLD
- Cyclosporine associated changes
- De novo glomerulitis
- Recurrent disease

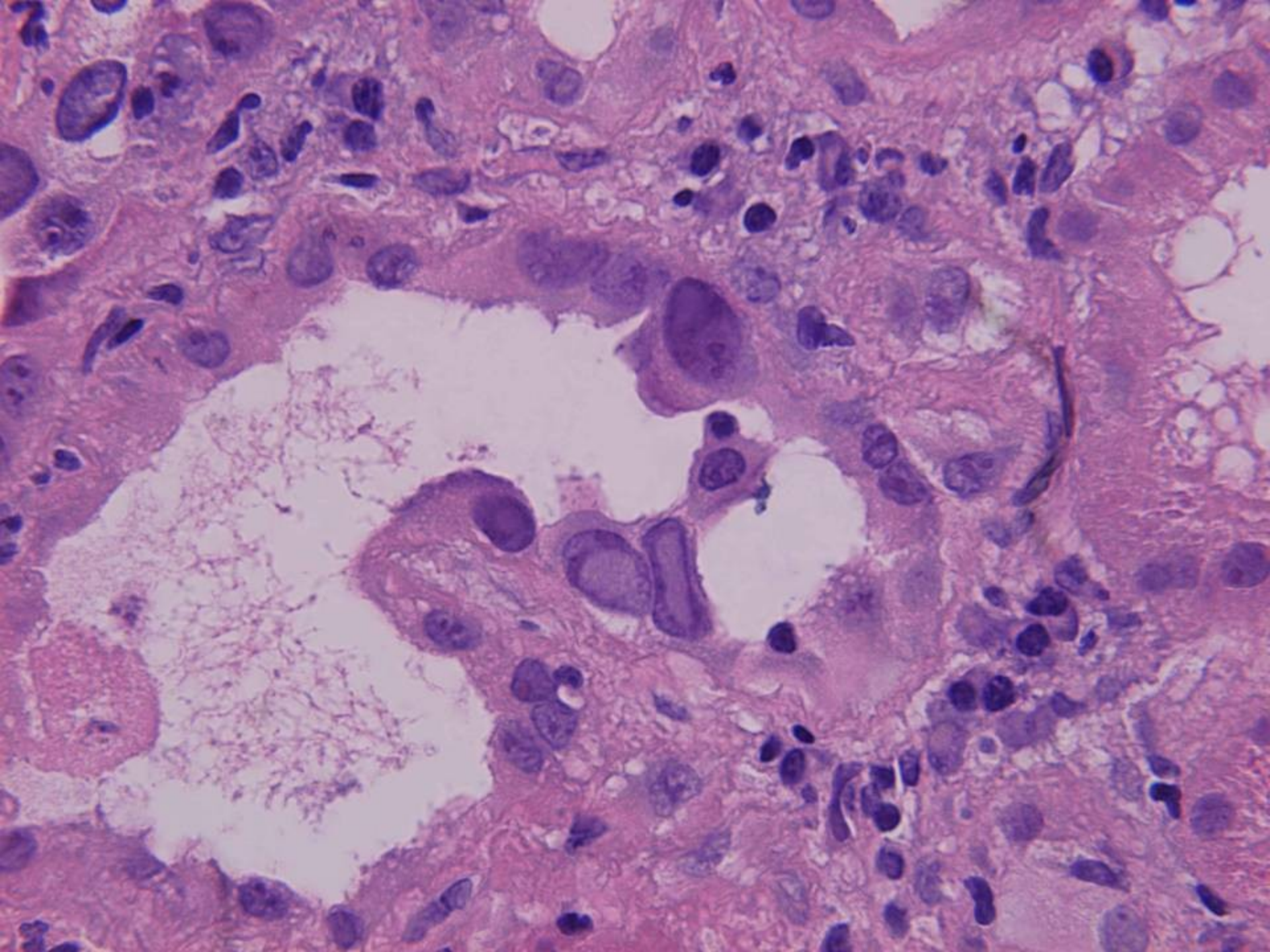


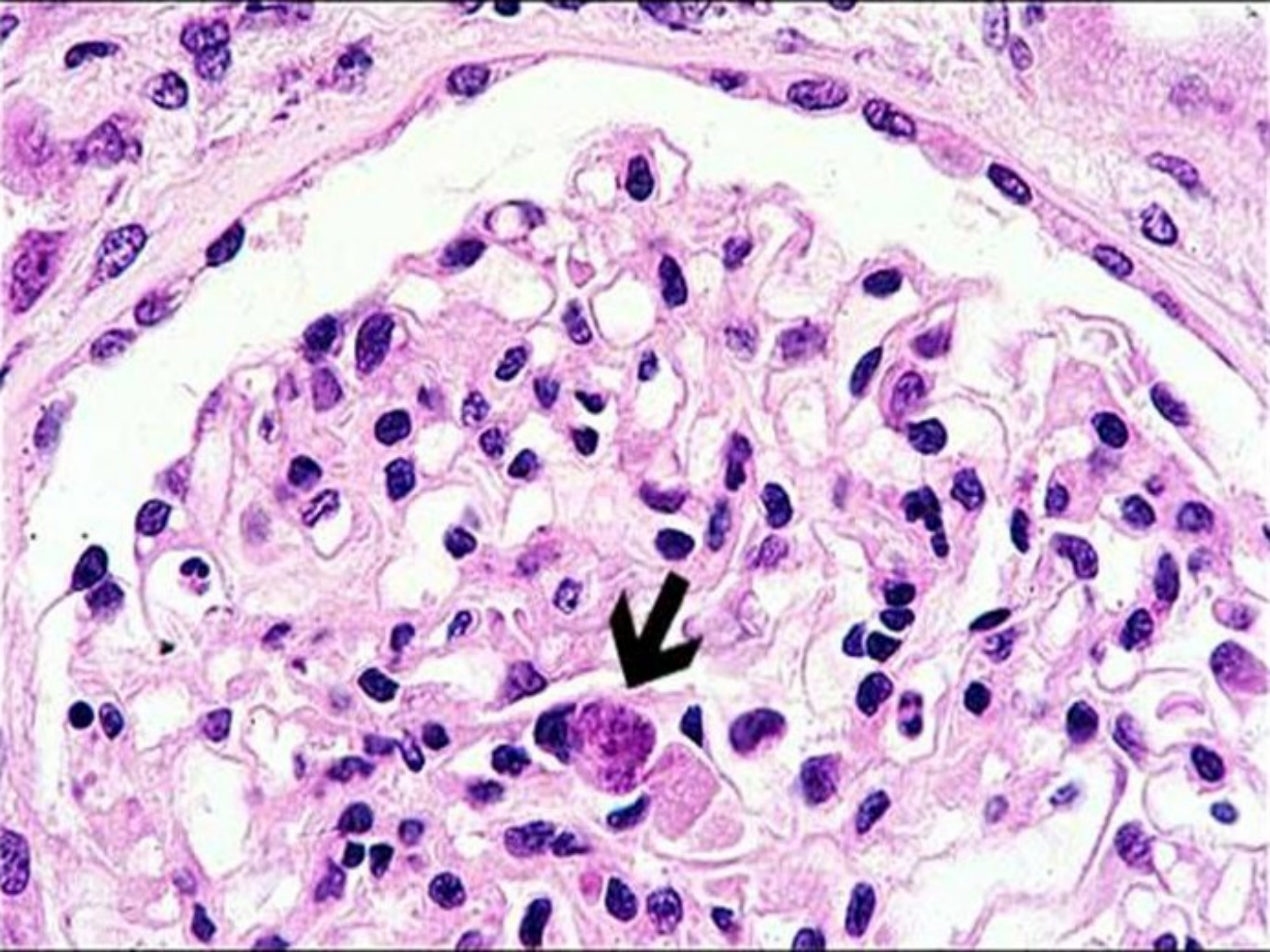
The Banff classification

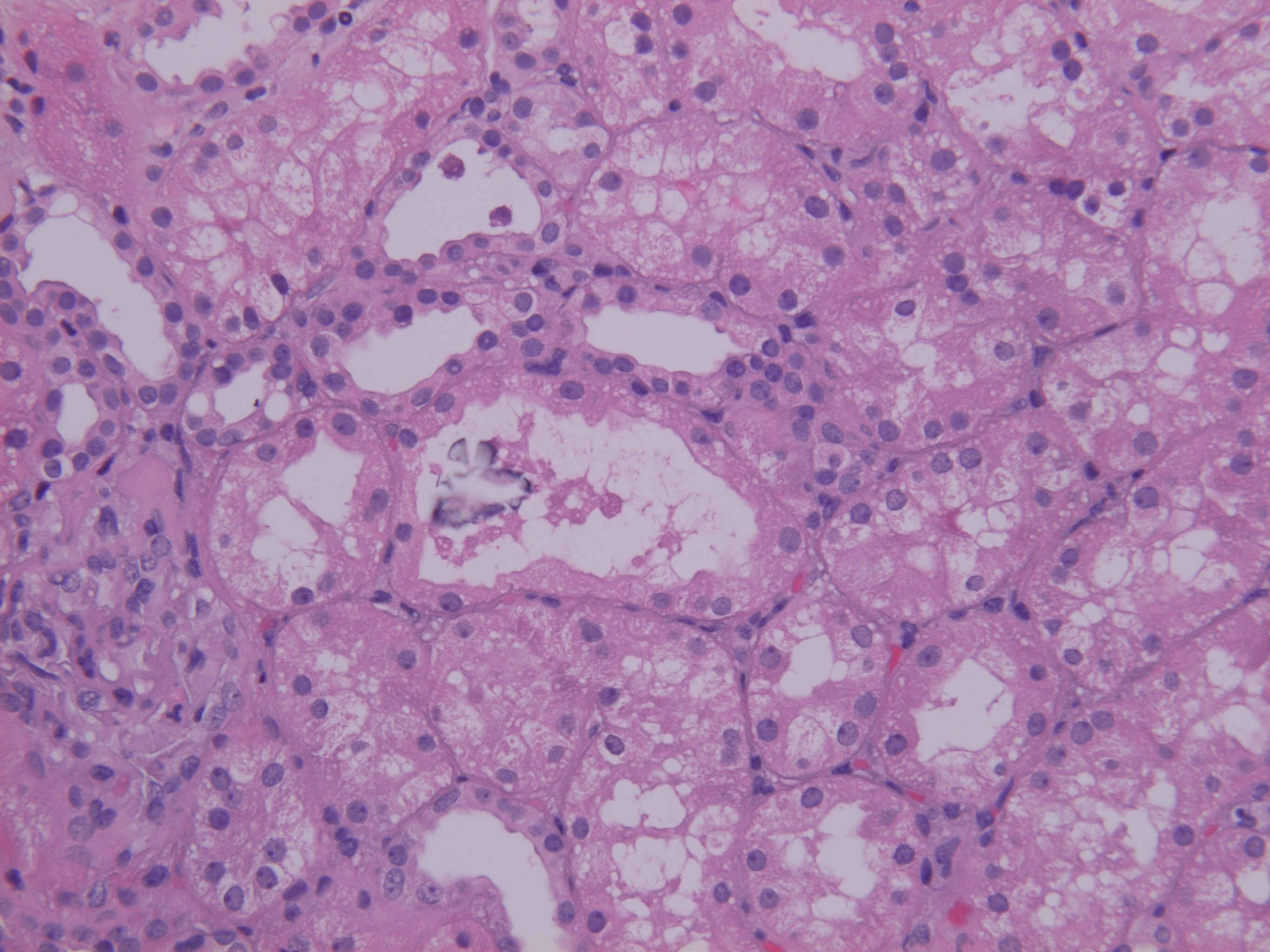
- Normal, Suspicious
- Grade I
- Grade II
- Grade III
- Cyclosporine toxicity
- Acute Tubular Necrosis
- Chronic transplant nephropathy
- No Treatment
- Treat if clinical signs+
- Treat
- Treat or Abandon
- Reduce Cyclosporine
- Await recovery
- Temporize

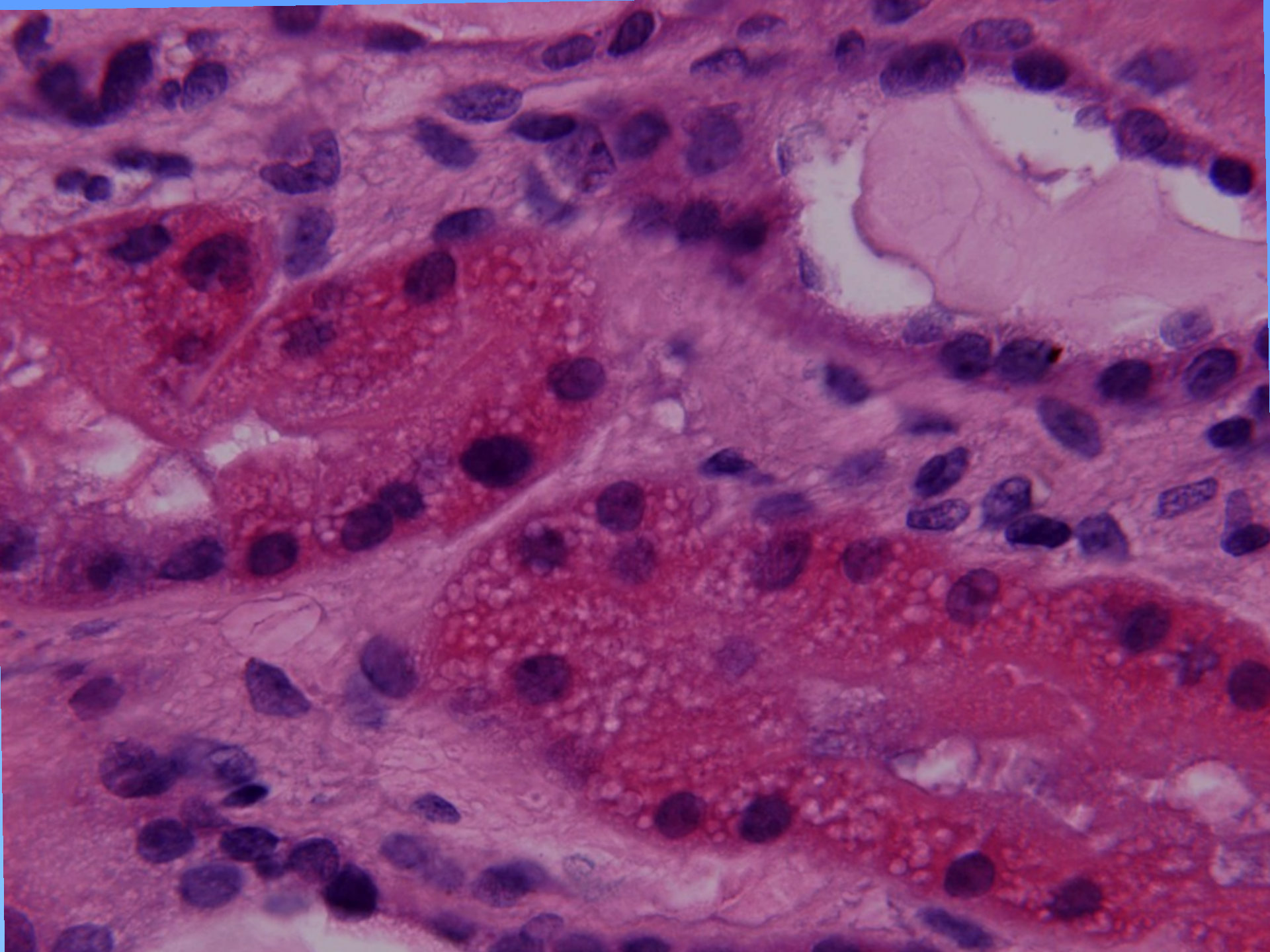


Infections
Recurrent or De Novo GN











cm 1 2 3 4 5 6
SPECIMEN S78-6601 DATE 9-30-7



CONCLUSION