

## Case History: Dr. Cynthia C. Nast

### Case #1

A 50-year-old Hispanic man presented with nausea, vomiting, malaise, and decreased urine output. He has had mild weight loss over the last 3 months and reports feeling intermittently febrile, although did not take his temperature. He denies diarrhea, hematemesis, hemoptysis, gross hematuria, or recent sore throat. He has had difficulty voiding for the last 9 months, and a CT scan 9 months ago revealed an atrophic right kidney and mild left-sided hydronephrosis and hydronephrosis. He has no history of hypertension or diabetes.

### Social/Family History

- The patient is from Mexico and currently works in landscaping. He denies smoking or alcohol or drug use. There is no family history of renal disease.

### Medications

- None

### Physical Examination:

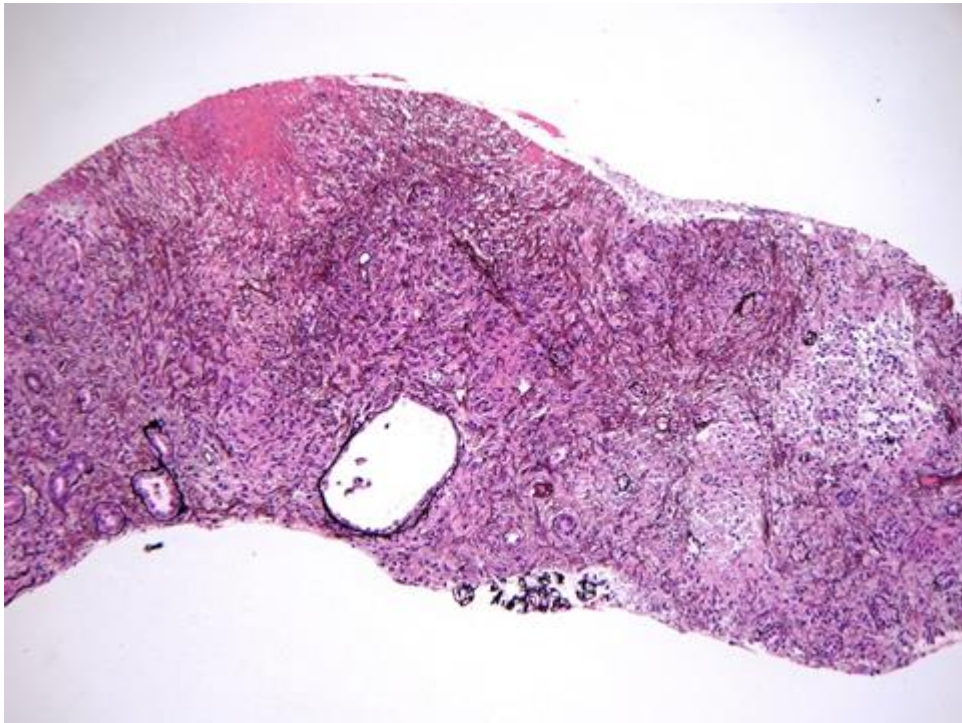
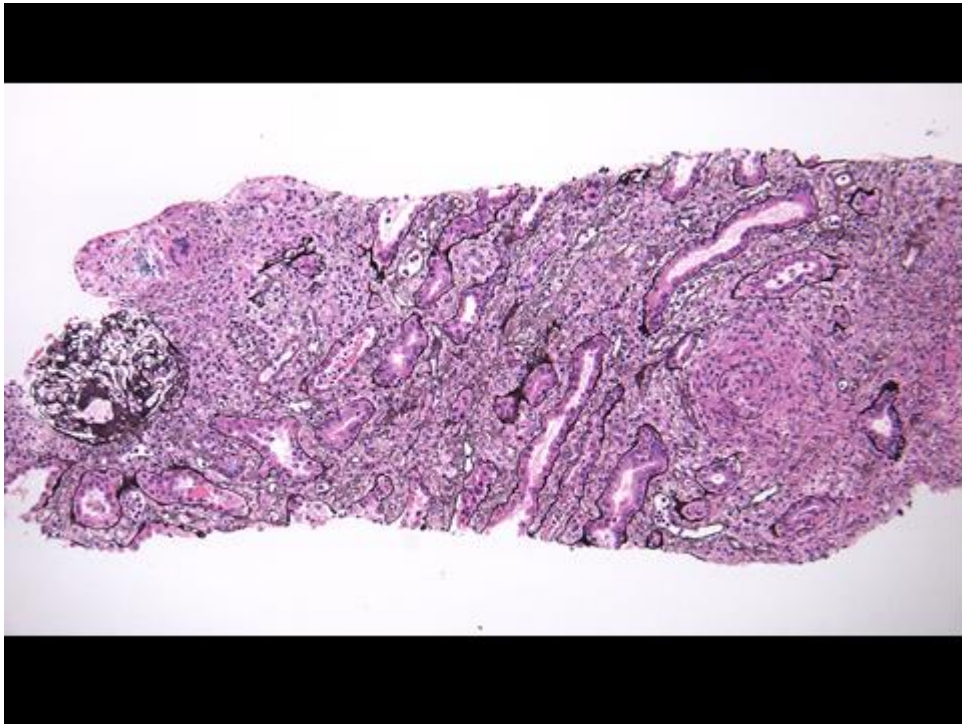
- BP 141/69
- Respirations 16
- O<sub>2</sub> sat 99%
- Temperature 99.5°F
- HEENT: No petechiae, sinusitis, erythema, or lesions
- Lungs: No wheezing or rhonchi
- Heart: Soft systolic murmur, S1 S2 normal
- Abdomen: No tenderness; bowel sounds present
- Ext: No edema, ecchymoses, petechiae. Pulses are present.

### Labs:

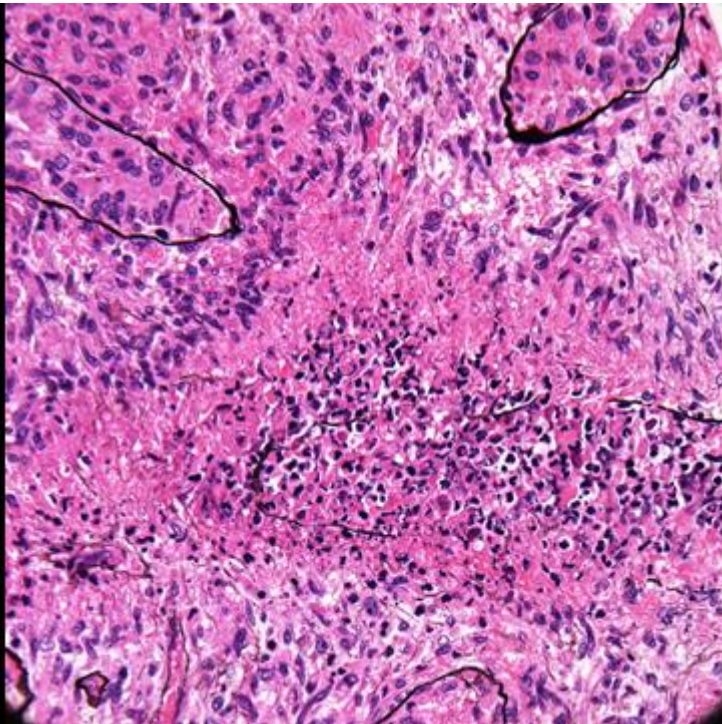
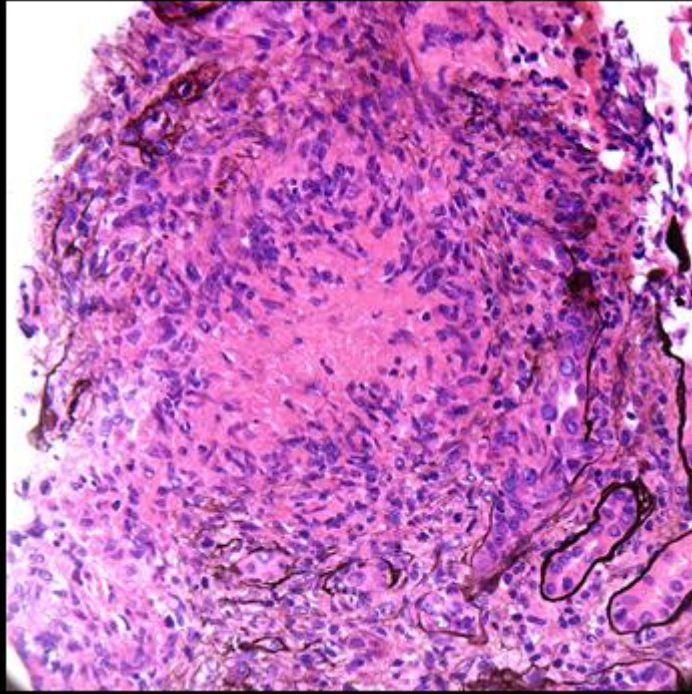
- Creat 19.5 mg/dL  
BUN 201
- Glucose 93  
Na 122, K 6.5, bicarb 7, chloride 85, calcium 7.9
- Hgb 8.7, Hct 26, WBC 9400, INR 1.2
- HIV, Hep B, Hep C, ANA, ANCA, SPEP all negative
- Urine analysis: 1+ blood, negative protein, 11–20 WBCs, 0–3 RBCs, negative urine culture

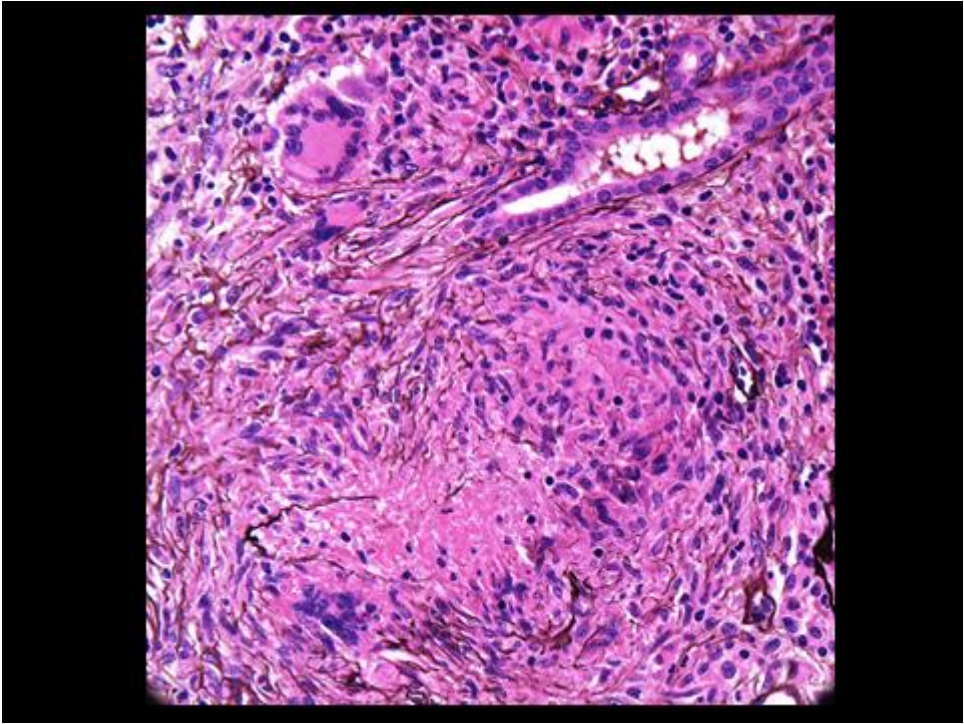
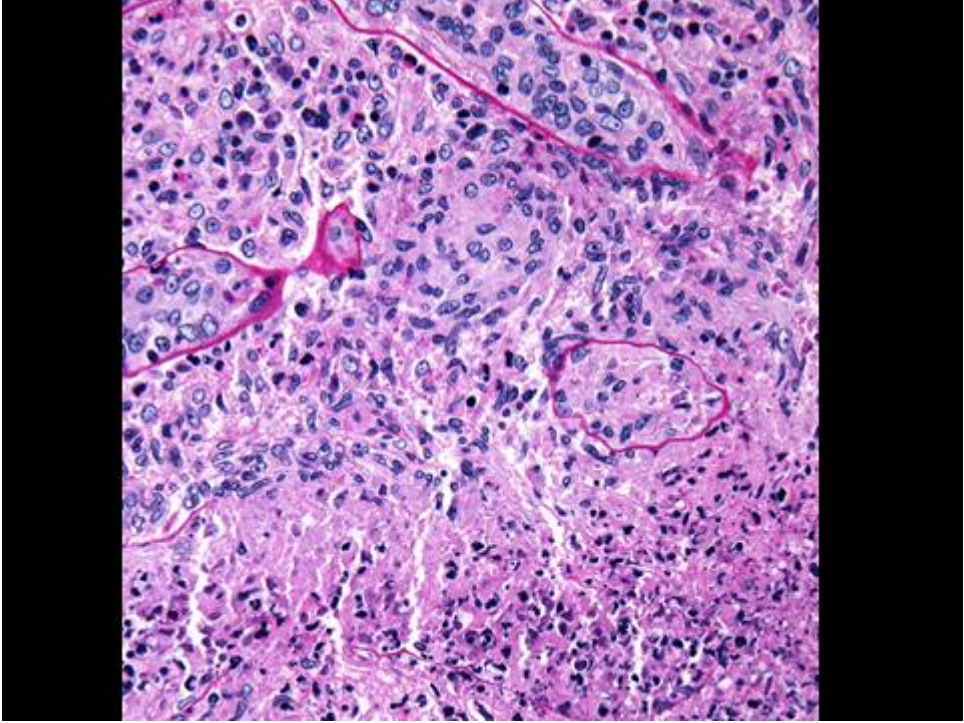
### Imaging

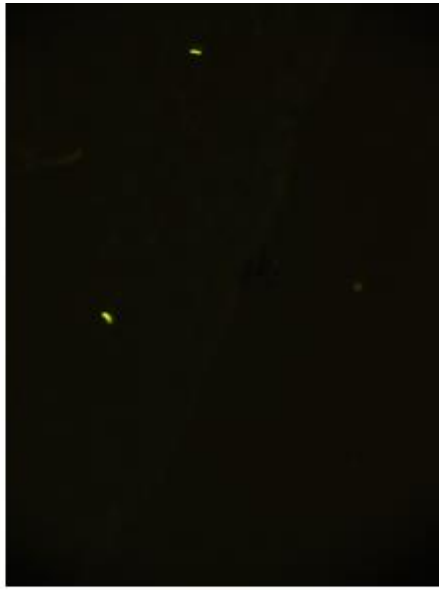
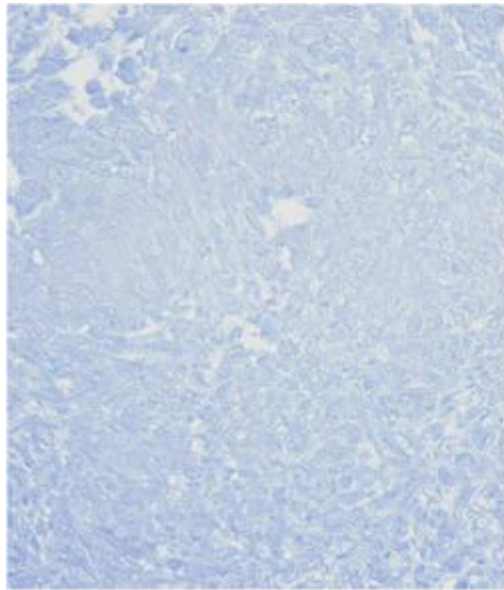
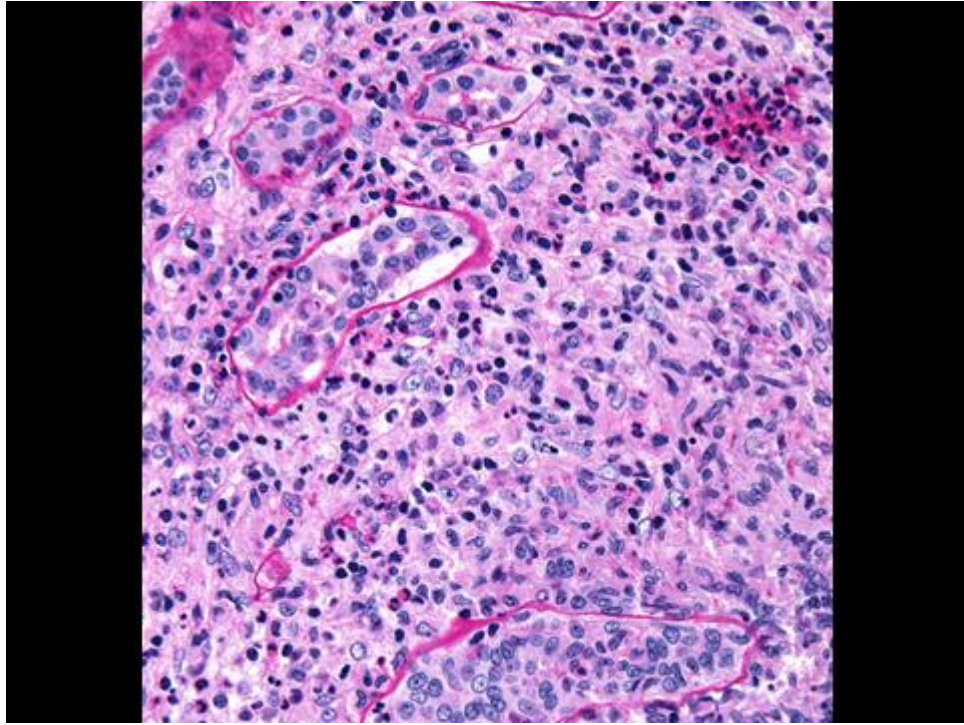
- CT: Right kidney is atrophic. Left kidney is enlarged and shows an infiltrating density/mass on the posterior aspect without hydronephrosis.





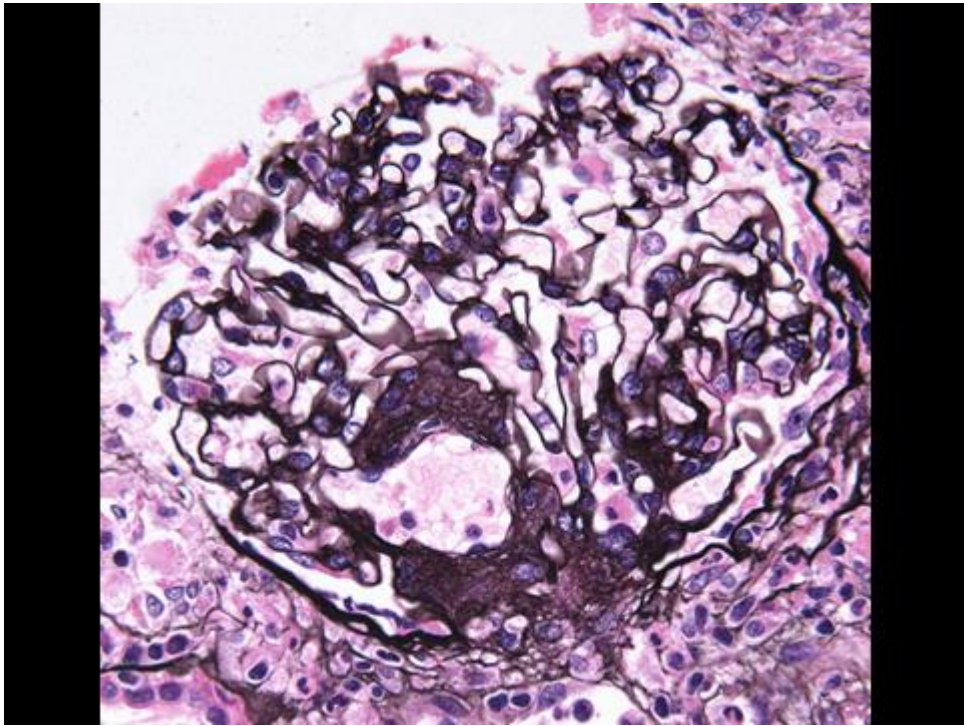
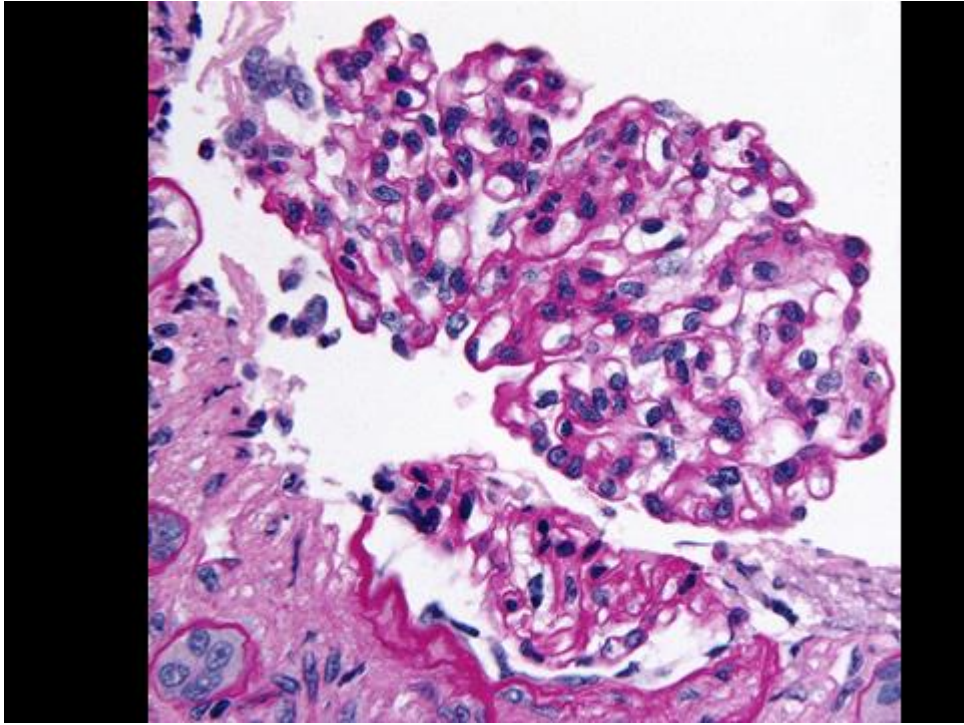


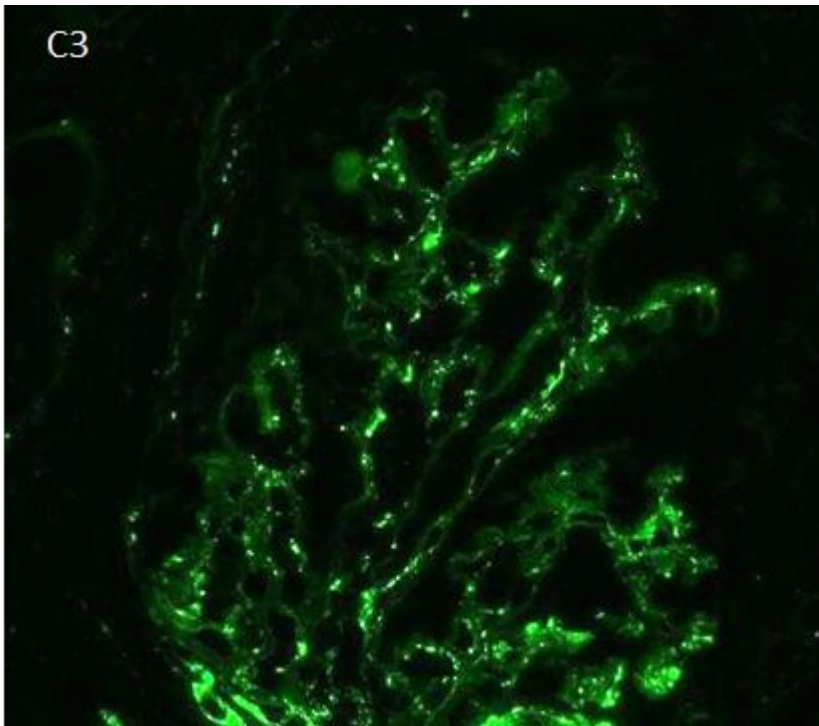
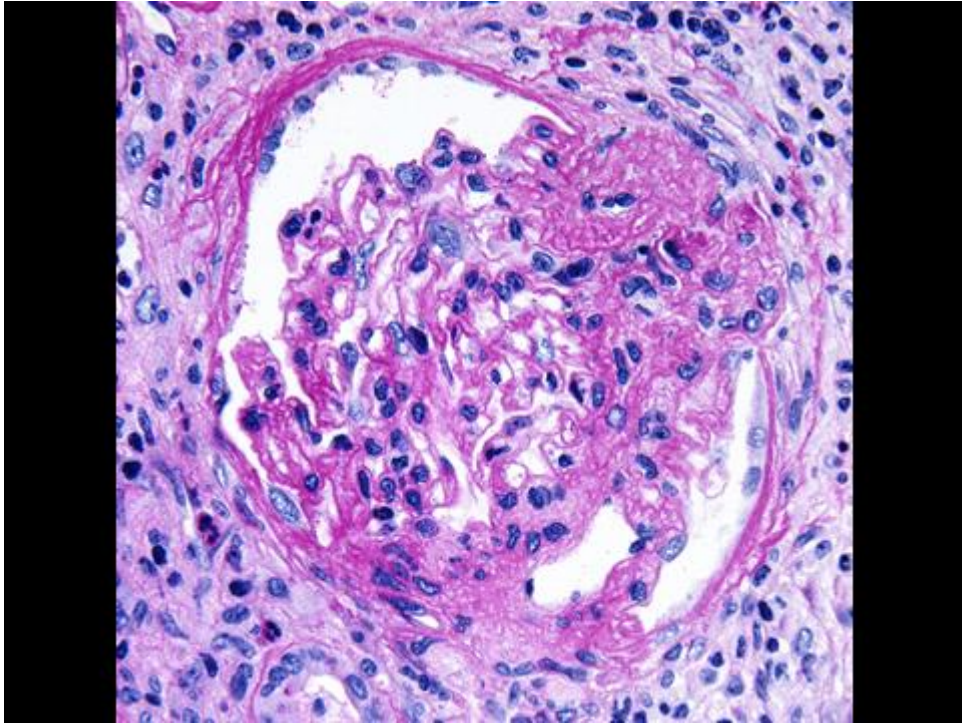




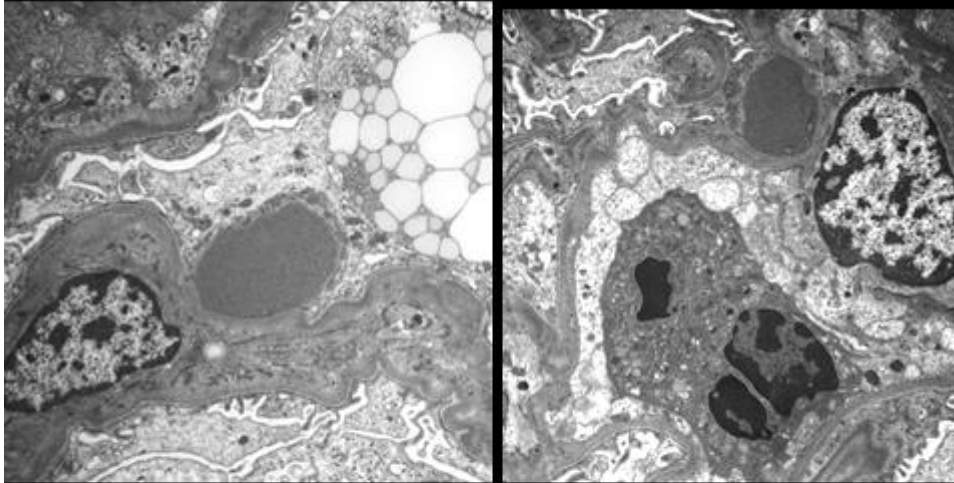
AFB stain

Auramine-Rhodamine









Electron Micrographs

1. **What process/structures are present in the kidney biopsy?**
  - A. Glomerular crescents
  - B. Nonnecrotizing granulomas
  - C. Arteritis with fibrinoid necrosis
  - D. Necrotizing granulomas
  - E. Calcium-containing macrophages
  
2. **These structures may be associated with which of the below?**
  - A. Hepatitis B infection
  - B. Fungal infections
  - C. Hepatitis C infection
  - D. Mycobacterial infection
  - E. Bacterial pyelonephritis
  
3. **Associated glomerular lesions may include**
  - A. Crescentic glomerulonephritis
  - B. Membranous glomerulonephritis
  - C. Post-/peri-infectious glomerulonephritis
  - D. IgA nephropathy