

ASN CNC Renal Biopsy: Clinical Correlations Session: Dr. Neeraja Kambham

Case #2

Clinical History: A 50-year-old asymptomatic woman with proteinuria detected on routine urinalysis. The urine protein to creatinine ratio was found to be 4.8, and the patient was referred to a nephrologist. No history of leg swelling.

Medical History: No major health problems with the exception of mild anxiety/depressive disorder. Review of her laboratory investigations over several years revealed abnormal urinalysis 18 years prior with 1+ protein, but no cells.

Medication History: Prozac 20 mg once daily.

Family and Social History: Patient is of Chinese descent but has lived in the United States for more than two decades. Her father died in his third decade of life during attempted escape from mainland China to Taiwan, presumably from complications related to infection and kidney failure. The patient has two healthy adult children and her mother is in good health. She works as an accountant and does not smoke, drink alcohol, or use recreational drugs.

Physical Examination

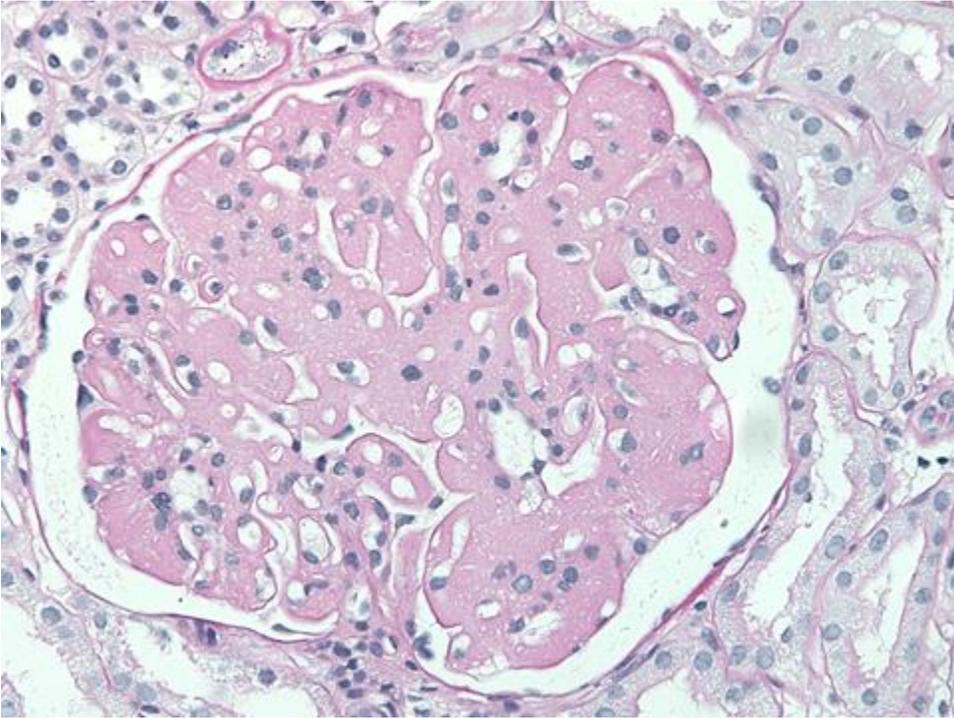
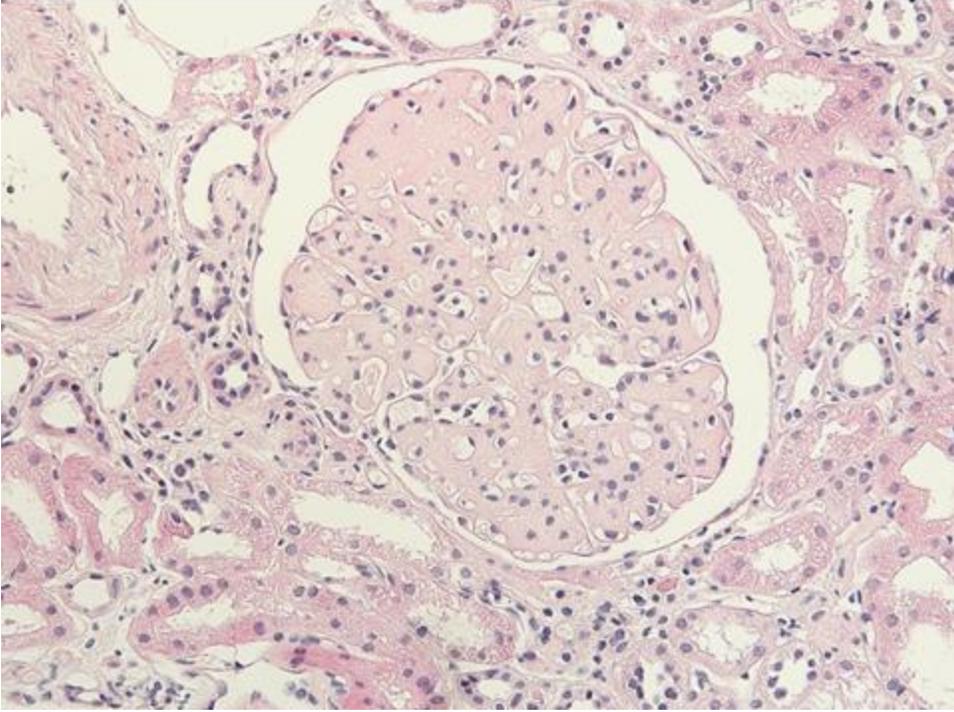
- Blood pressure: 130/80 mmHg
- Heart rate: 72 beats/min
- Weight: 123 lbs
- No pedal edema was noted and review of systems was essentially unremarkable.

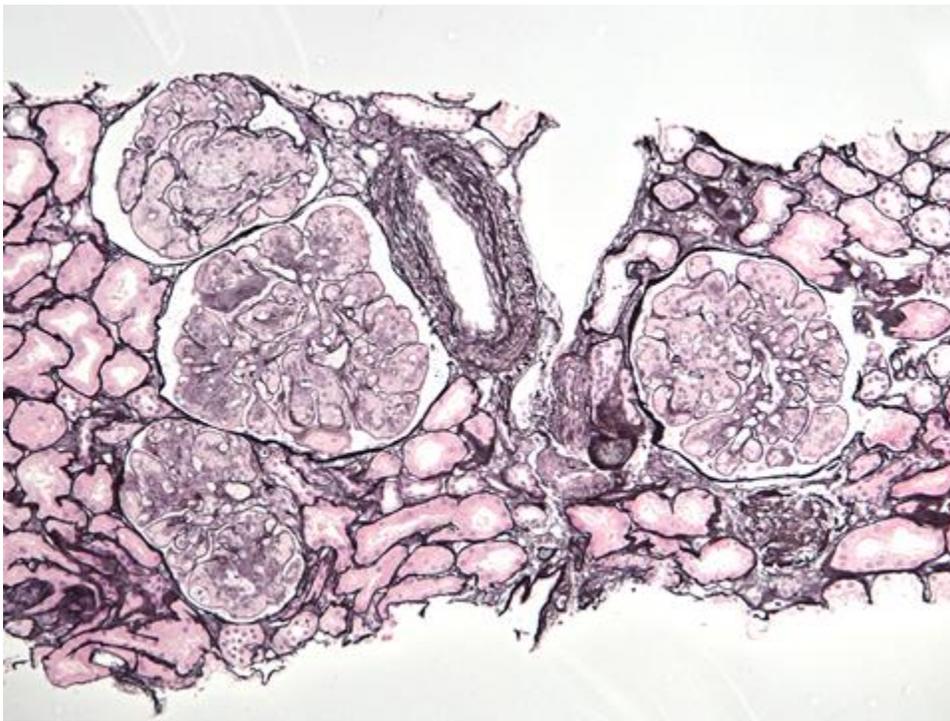
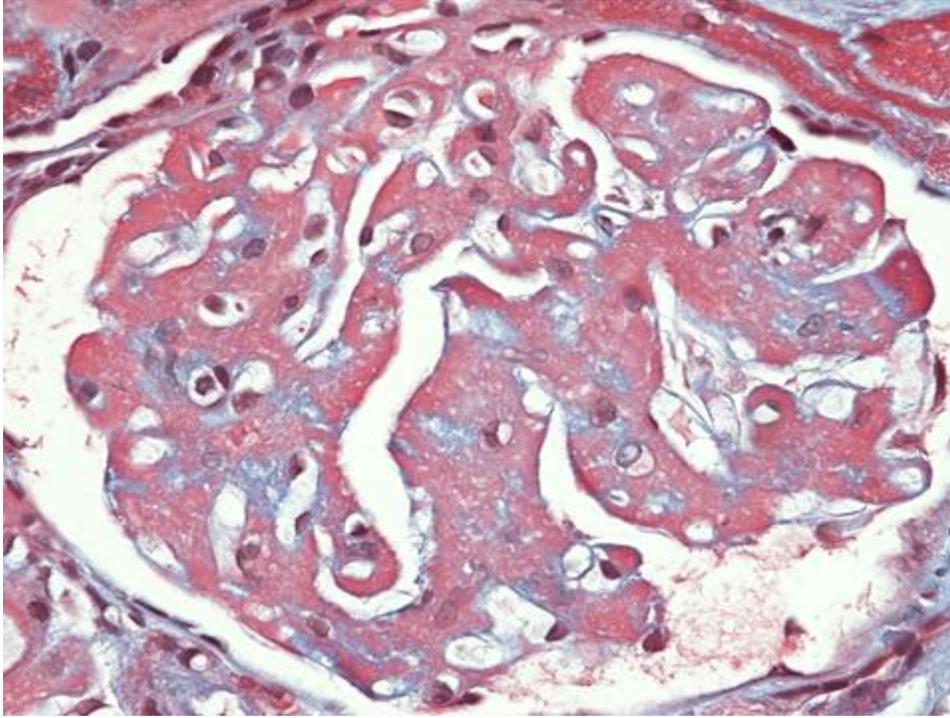
Laboratory Investigations

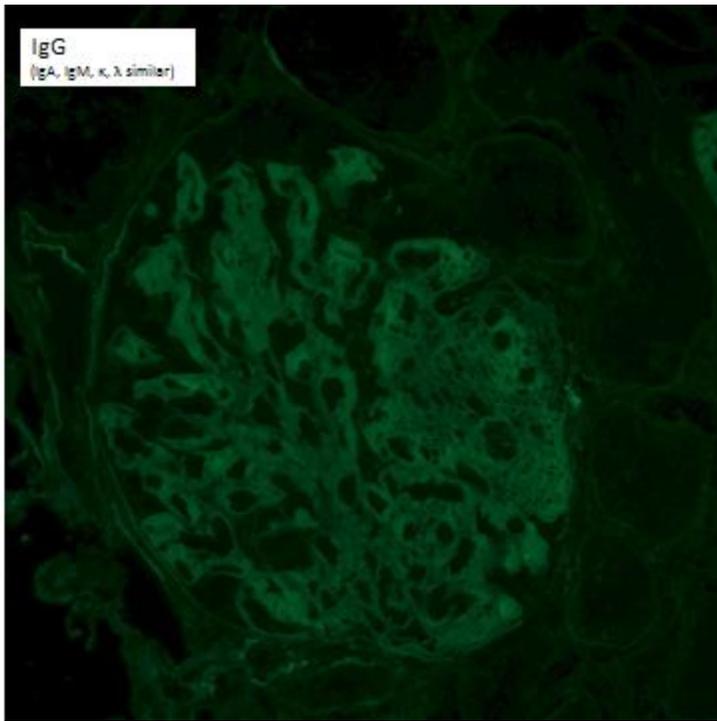
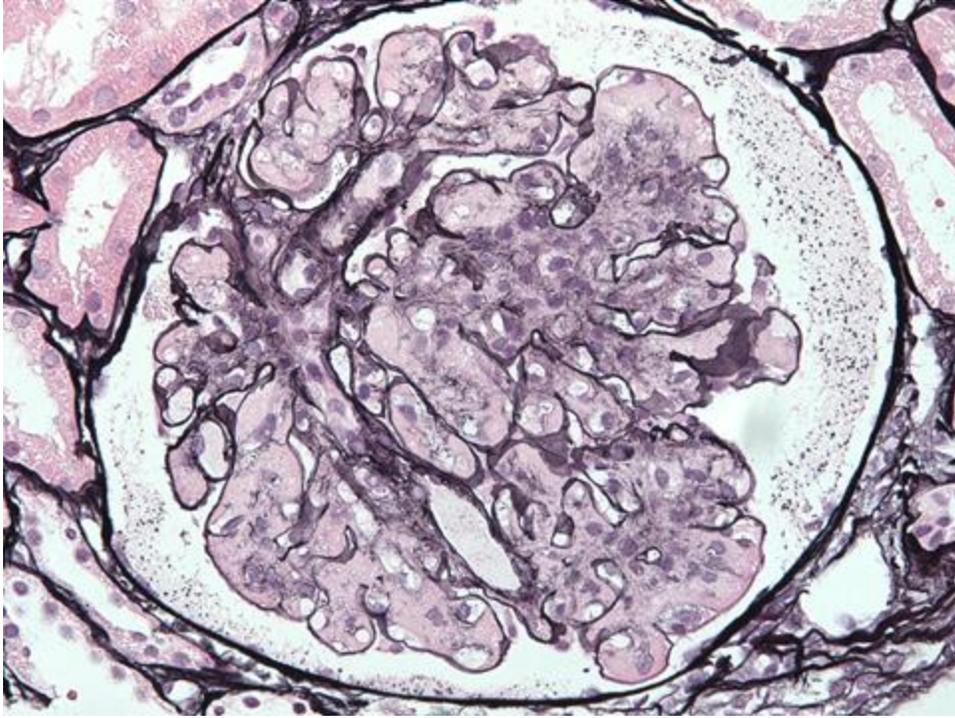
- Urinalysis: 3+ protein, trace blood, 5 red blood cells/HPF, no casts
- Serum creatinine 0.8 mg/dL
- Serum albumin 3.0 g/dL
- Serum cholesterol 280 mg/dL (HDL 95, LDL 190)
- ESR 46
- Other investigations including serum electrolytes, liver function tests, lactate dehydrogenase, CPK, hepatitis B, hepatitis C antibodies, ANA, ANCA, cryoglobulins, C3, C4, SPEP, PT, and PTT were all negative or normal.

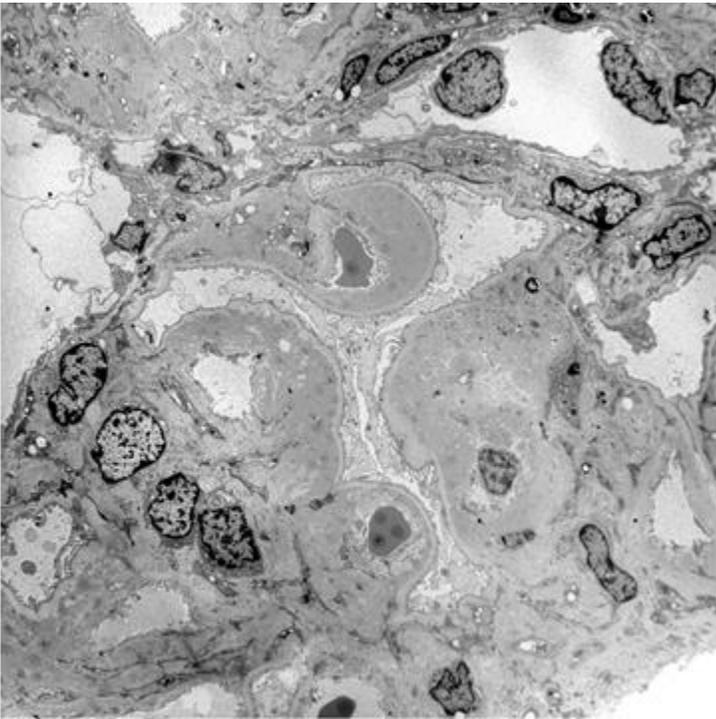
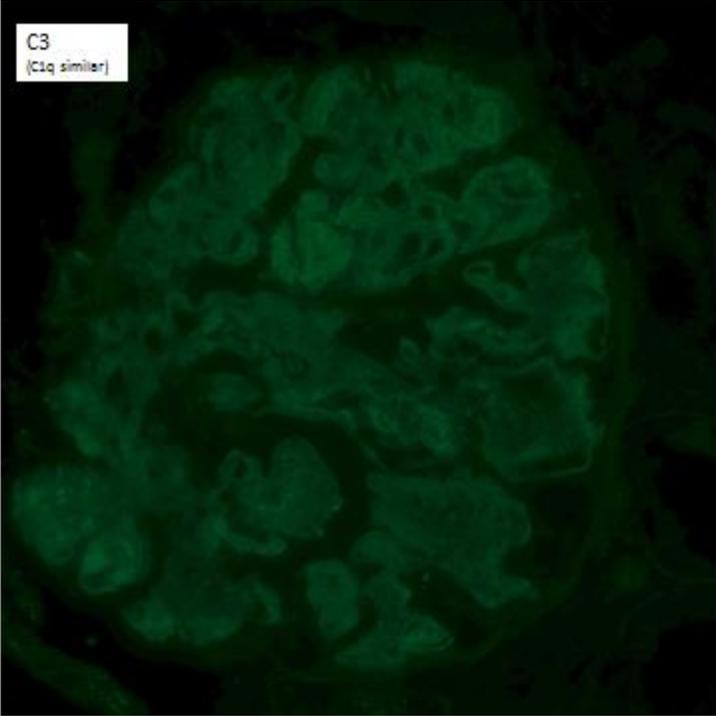
Renal ultrasound was unremarkable.

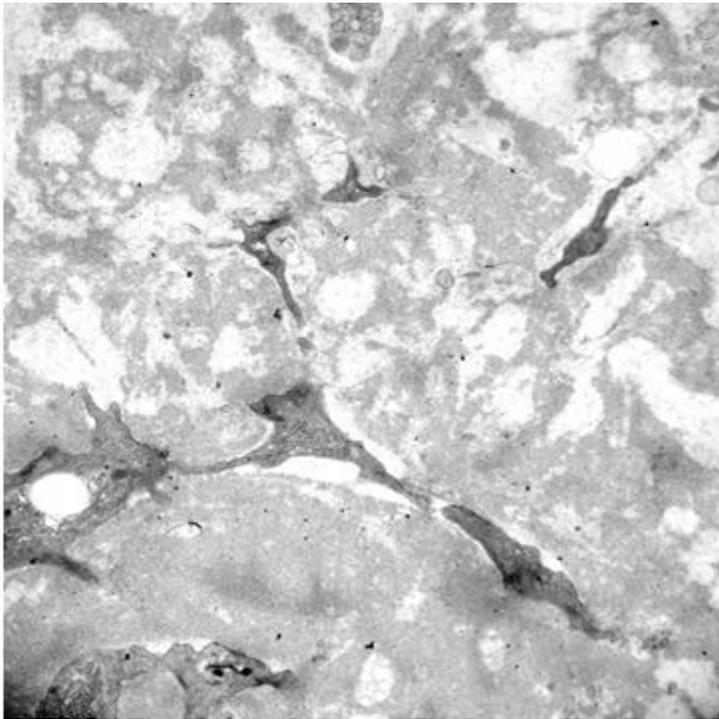
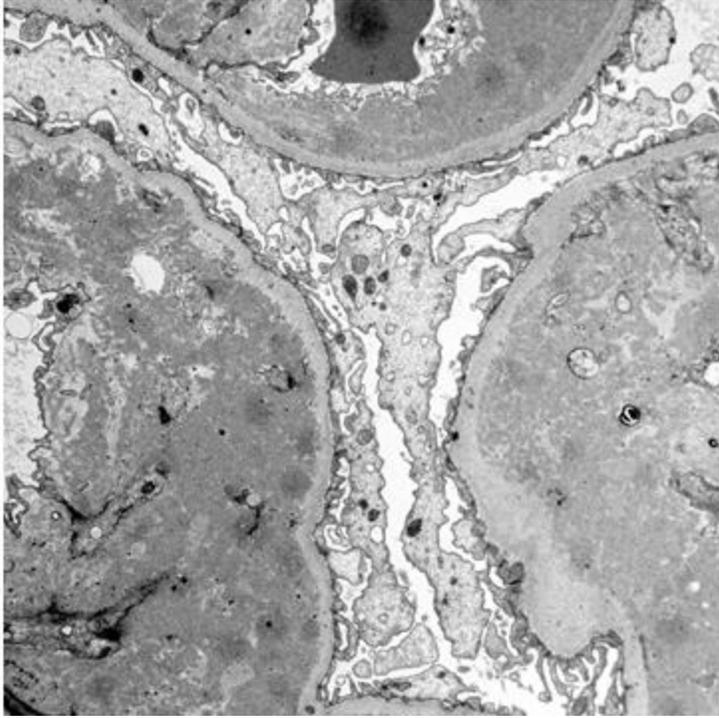
A kidney biopsy was performed.











1. The clinical presentation may be compatible with (choose all that apply)

- A. IgA nephropathy
- B. Membranous nephropathy
- C. Thin basement membrane disease
- D. Drug-induced nephrotoxicity
- E. Postinfectious glomerulonephritis

2. The histology and histochemical staining pattern is supportive of

- A. Diabetic nephropathy
- B. Diffuse proliferative and exudative glomerulonephritis
- C. Idiopathic nodular glomerulosclerosis
- D. Crescentic glomerulonephritis
- E. None of the above

3. Fibronectin staining in the glomerulus can be positive in

- A. IgA nephropathy
- B. Diabetic nephropathy
- C. Fibronectin glomerulopathy
- D. Light chain deposition disease
- E. All of the above

4. The ultrastructural features are characteristic of

- A. Amyloidosis
- B. Fibrillary glomerulonephritis
- C. Immunotactoid glomerulopathy
- D. Diabetic nephropathy
- E. None of the above