39 y/o M with abdominal pain

Atul Kumar, MD, MS

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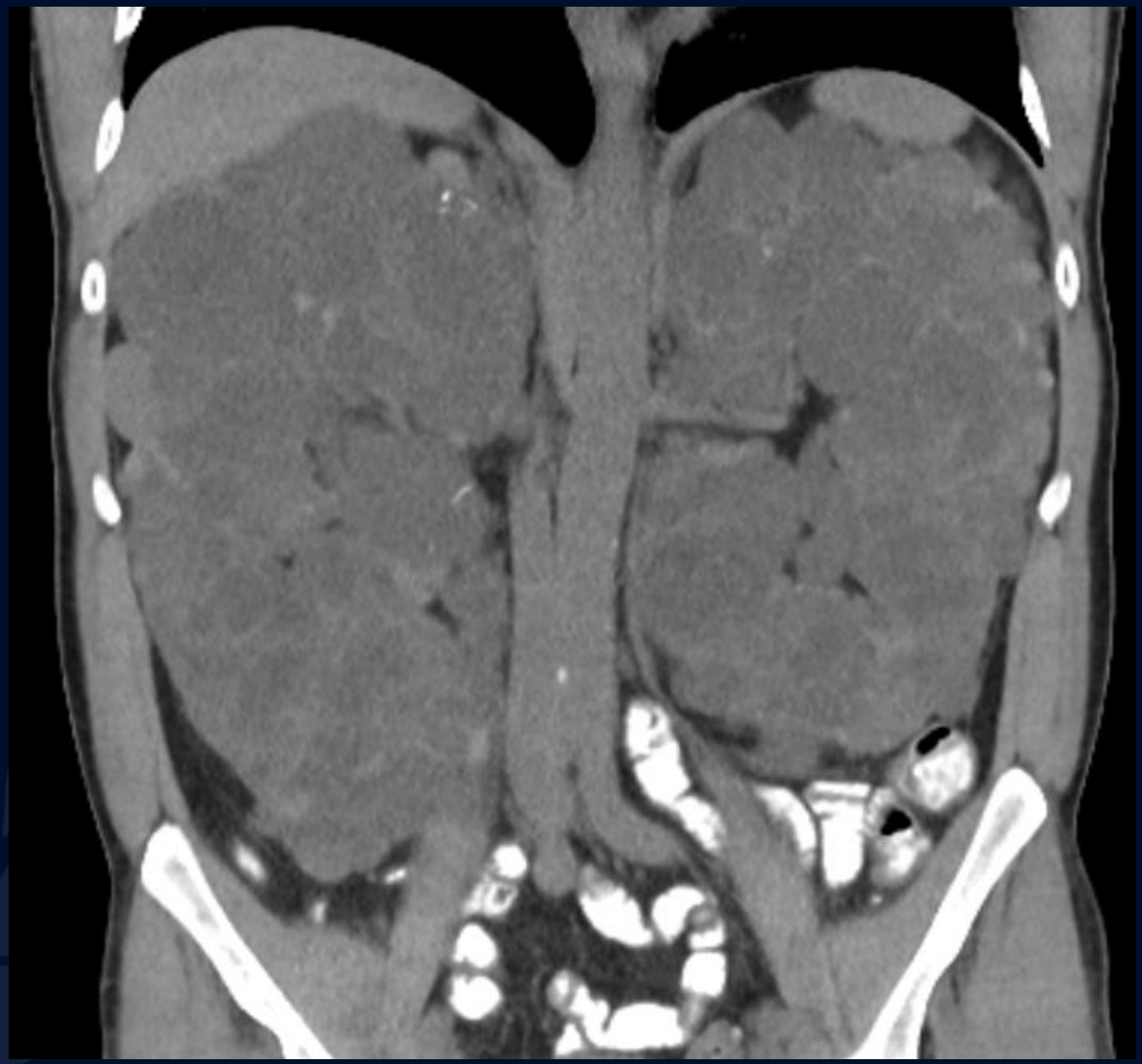

Coronal Noncontrast CT

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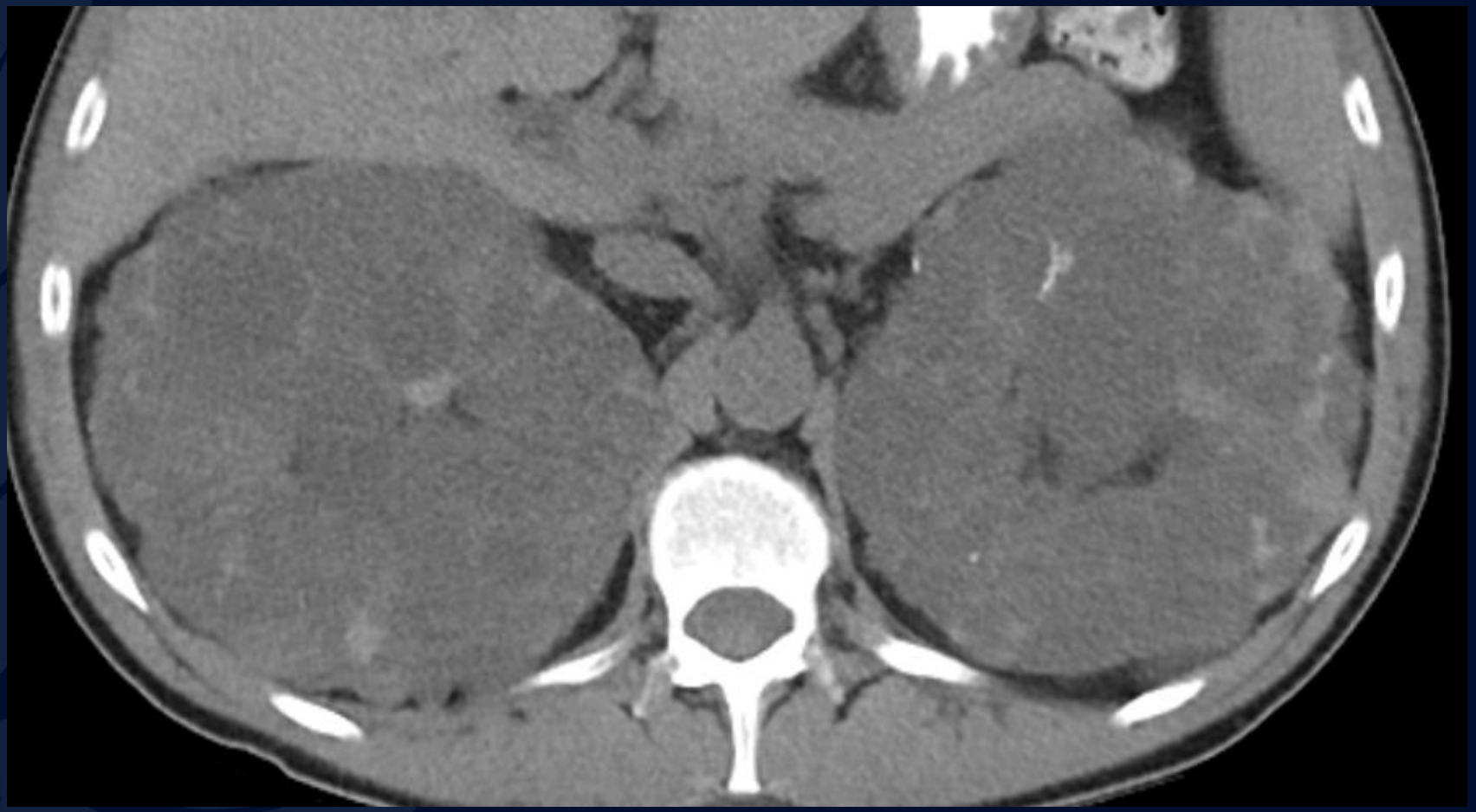

Axial Noncontrast CT

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Autosomal Dominant Polycystic Kidney Disease

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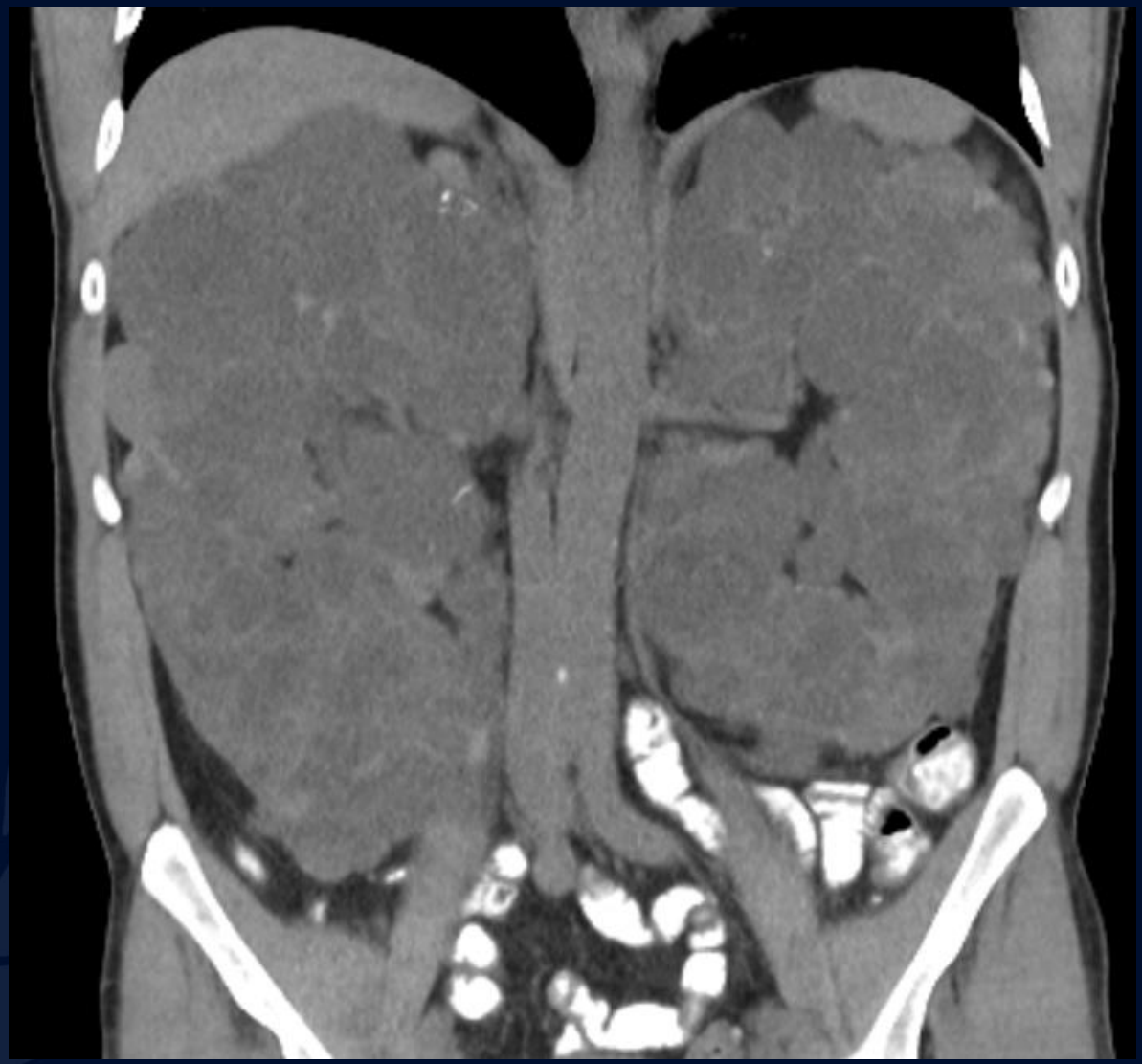

Large bilateral kidneys with multiple hypodense cysts

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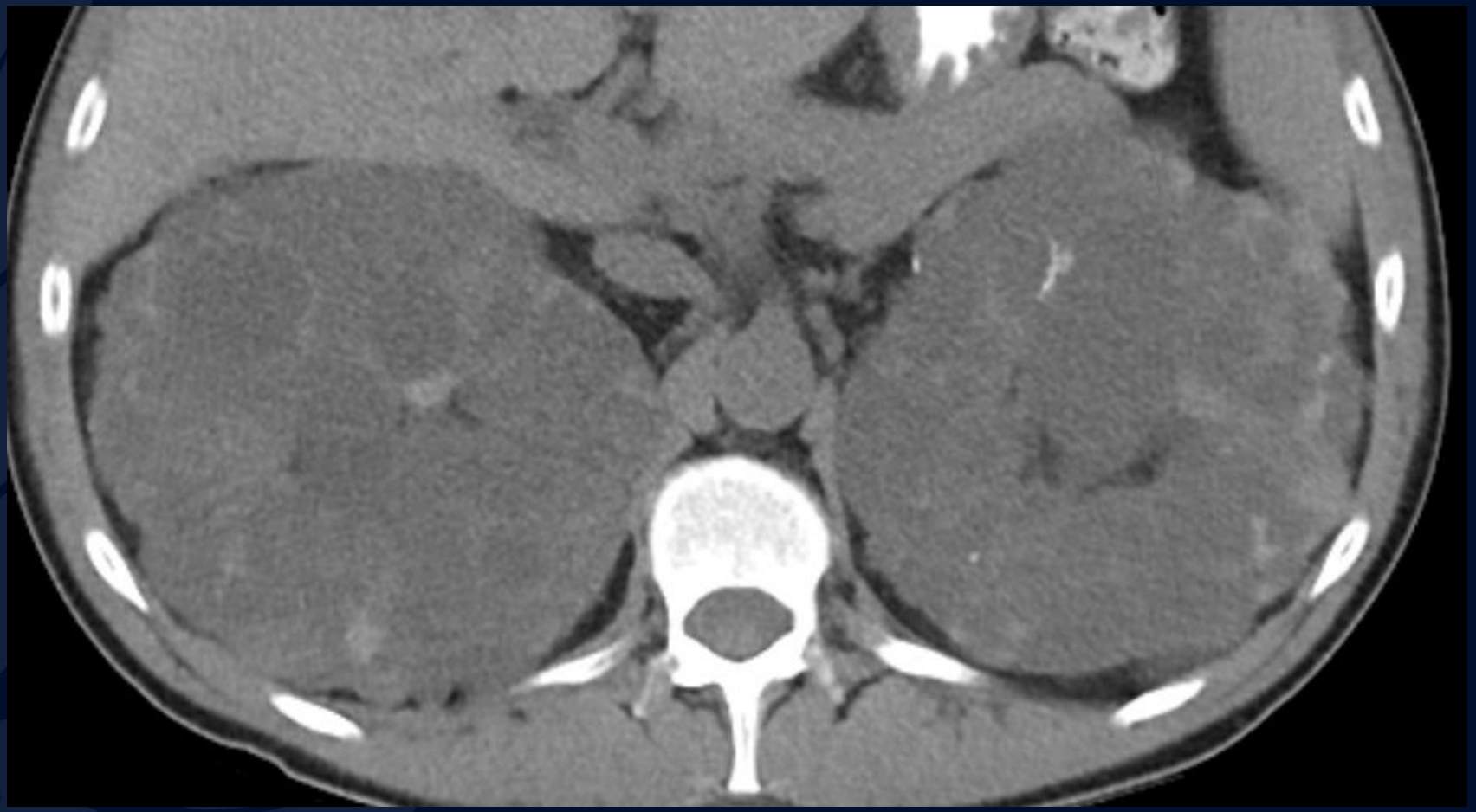

Large bilateral kidneys with multiple hypodense cysts

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ADPKD

- Autosomal dominant inherited renal disorder
  - PKD1: 85%
    - More severe form with earlier presentation
  - PKD2: 15%
    - Milder form with later presentation
- Progressive cystic growth of kidneys along with systemic associations
- Cystic dilatation of renal tubules
- Presentation
  - Asymptomatic
  - Abdominal/Flank Pain
  - Hematuria
  - Hypertension
- Differential Diagnosis
  - Multiple simple cysts
  - Uremic cystic disease
  - von Hippel-Lindau
  - Medullary cystic kidney disease
- No increased risk of renal cell carcinoma

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ADPKD

- Renal manifestations
  - Kidneys are normal at birth
  - By 30 y/o, ~ 68% have cysts detectable by ultrasound
  - By 50 y/0, ~ 50% will have ESRD
  - Cysts can be simple or complex
  - Cysts are bilateral
- Extrarenal manifestations
  - Polycystic liver disease
  - Cystic disease of other organs
  - Abdominal wall hernia
  - Cardiac valve abnormalities, specifically aortic and mitral
  - Arterial brain aneurysms (Berry)
  - Aortic aneurysms
  - Colonic diverticula

References

- www.my.statdx.com
- www.radiopedia.org

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