

GUS 2023 PATHOLOGY LAB - I

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HYDRONEPHROSIS

- Causes ? **Congenital and acquired**
- Consequences? **Chronic renal failure if not treated early**

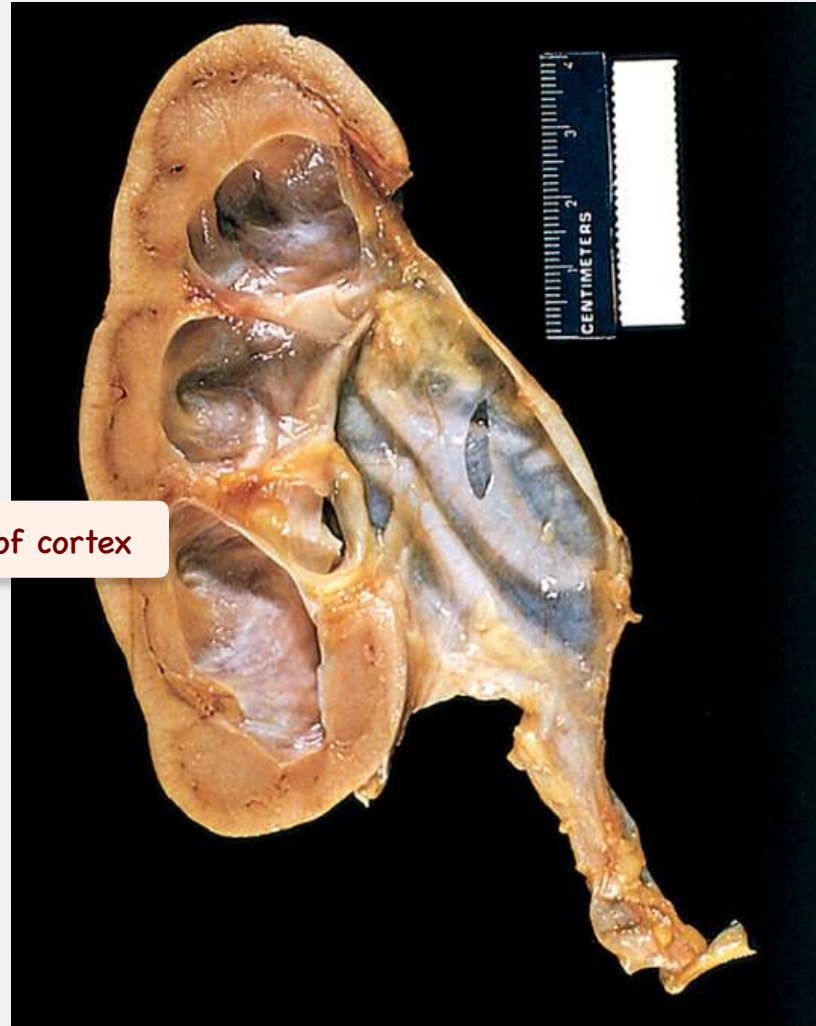
Because the damage of renal parenchyma + atrophy of cortex

Examples Congenital causes:

- Atresia of urethra
- Valve formations in ureter or urethra
- Aberrant renal artery compressing ureter
- Renal ptosis with torsion or kinking of ureter

Examples of Acquired causes:

- Foreign bodies
- Tumors
- Inflammation
- Neurogenic



SIMPLE RENAL CYSTS

- single or multiple
- confined to the cortex.
- contain clear fluid
- usually incidental diagnosis

- **what is the clinical significance?**

- good prognosis
- mostly asymptomatic
- symptoms : hematuria



Male patient, 45 years old, present with flank pain and distention, dragging sensation and Intermittent gross hematuria.

Autosomal Dominant (Adult) Polycystic Kidney Disease

PKD ADULT TYPE

- **what is the clinical significance?**

- **name genetic abnormalities.**

PKD1+PKD2

- 1- hypertension (75%)*
- 2- urinary infection
- 3- vascular aneurysms of circle of Willis*
- 4- renal failure at age 50

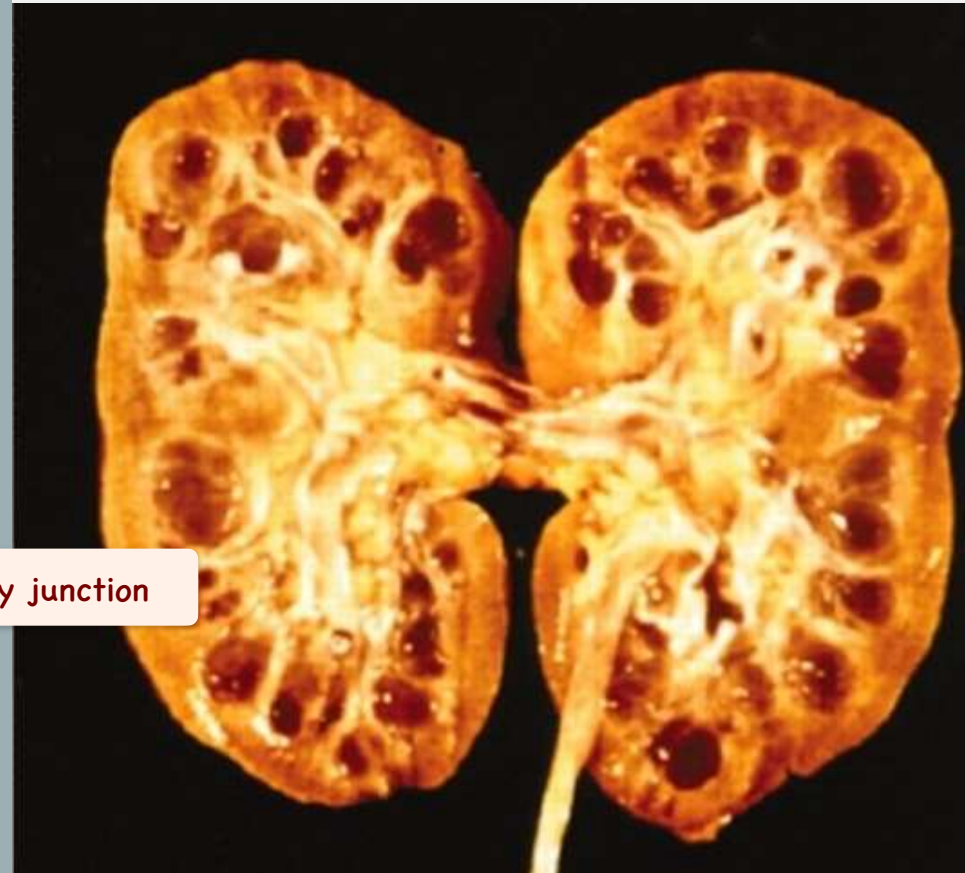


NEPHRONOPHTHISIS-MEDULLARY CYSTIC DISEASE COMPLEX

- Usually in childhood
- bad prognosis

- **Location of cysts?**
- **what is the clinical significance?**

- polyuria and polydipsia (\downarrow tubular function).
- renal failure over 5-10-year

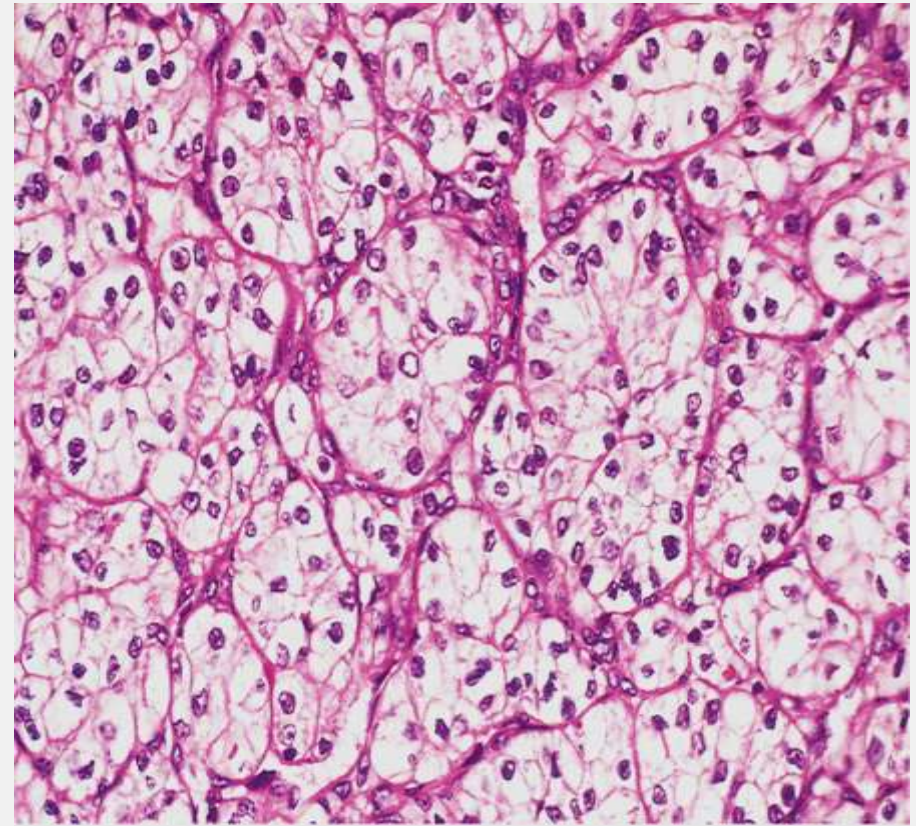


CLEAR RENAL CELL CARCINOMA

- cells with clear cytoplasm.

• **Name a genetic predisposing factor?**

VHL gene mutation



RCC

- **Types?**

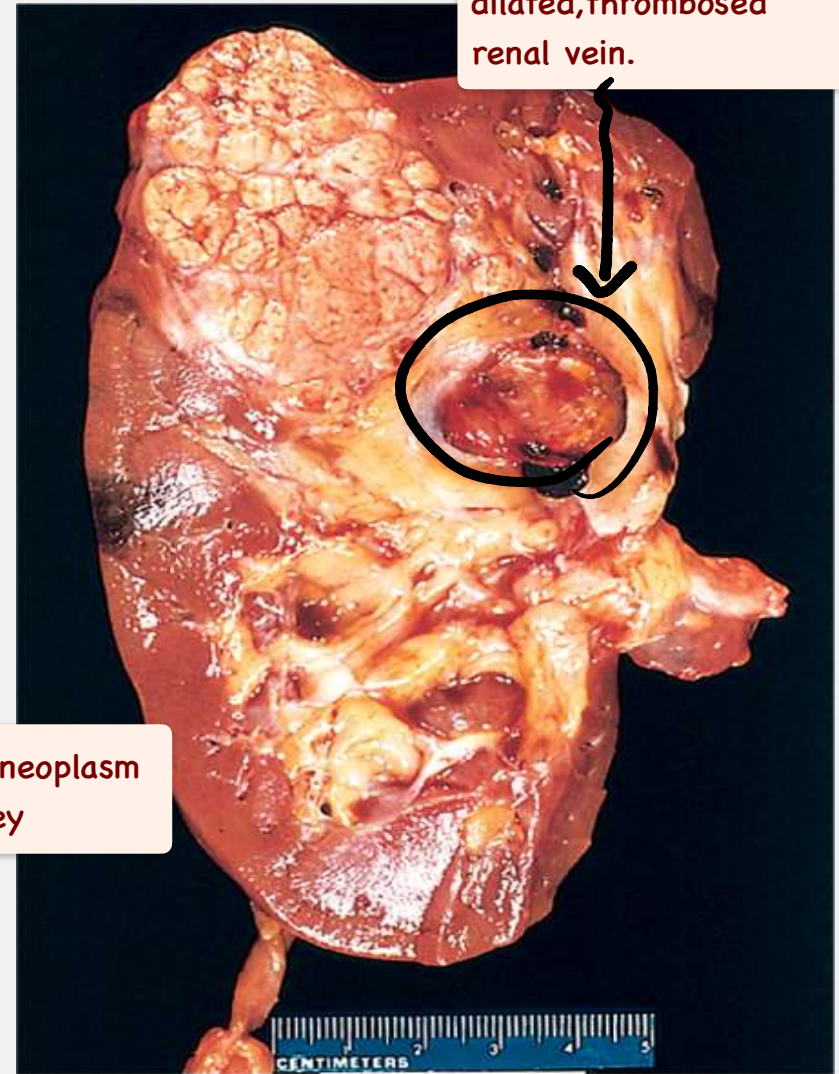
- clear cell carcinoma
- papillary renal cell carcinoma
- chromophobe renal carcinoma

- **morphology ?**

Yellowish, spherical neoplasm in one pole of kidney

- **paraneoplastic syndrome associated with this tumor?**

hypercalcemia, Hypertension, Cushing syndrome, feminization or masculinization



Note the tumor in the dilated, thrombosed renal vein.

UROTHELIAL PAPILLARY CARCINOMA- LOW GRADE

Risk factors?

not familial

- Chronic inflammation (major risk factor)
- stone formation
- β -naphthylamine (paints; cigarettes)
- Cigarette smoking
- Chronic cystitis.
- Schistosomiasis
- drugs as cyclophosphamide.

