Cystic diseases of the kidney	Inherited/ Acquired	Size and number	Clinical appearance	Location	Complications	Notes
Simple Cysts		- Single or multiple - 1-5 cm in diameter	- No clinical Significance - Hemorrhage - Pain - Filled with clear fluid - **Favorable** Prognosis	**- Confined to the cortex**		Discovered incidentally or because of hemorrhage and pain Imp to differentiate it from kidney tumors
Dialysis -associated Acquired Cysts	**Acquired** -In patients with renal failure who have **prolonged dialysis**	Numerous/ multiple		-Cortex -Medulla	**-Renal Carcinoma** - Pain - Hematuria (due to hemorrhage)	Can transform into a malignant tumor.
Autosomal dominant (Adult) Polycystic Kidney Disease	**Inherited** Autosomal dominant 1. PKD1 gene (MORE COMMON) – Polycystin 1 2. PKD2 gene - Polycystin2	-**Multiple** -**Bilateral** -**Varies in size** (mostly large)	- Onset of symptoms in Adults (4th decade) - Increase in kidney weight and size - Multiple bilateral cysts replacing renal parenchyma. - Forms lobules on the external surface of the kidney **Symptoms**: 1. Flank **pain**	- Cortex - Medulla	**-Hypertension (70%)** -Urinary infection -Vascular aneurysms of circle of Willis → **Subarachnoid hemorrhage** **Most feared complication:** - **Renal failure 10 years after** onset of symptoms.	**Represents 10% of chronic renal failure**

			2. **Heavy dragging sensation** 3. Abdominal mass - Hemorrhage 4. **Obstruction** (stones/hemorrhage of the cyst) 5. Intermittent gross **hematuria**			
Autosomal Recessive (Childhood) Polycystic Kidney Disease	Inherited Autosomal recessive - PKHD1 gene- Fibrocystin mutation (function of cilia in tubular cells)	-Multiple **-Tiny fusiform cysts**	-Onset of symptoms in **childhood** **- Associated with liver cysts** - Enlarged kidney	-Thrown and seen within the parenchyma	**-Chronic renal failure**	Types: 1. Prenatal 2. Neonatal 3. Infantile 4. Juvenile
Medullary Cystic Disease	-Present with positive family history (medullary-uremic)		-Always associated with renal dysfunction - Begins in **children** -Medullary-uremic type: -Polyuria	-**Cortico-medullary junction**	- **Medullary-uremic type (Nephronophthisis):** **Renal failure over 5-10 yrs**	2 types: 1. **Medullary-uremic (Nephronophthisis-medullary cystic disease) complex** **(LESS COMMON-WORST TYPE)**

			-Polydipsia (decreased tubular function) **IMPORTANT** - Positive family history+ UNEXPLAINED chronic renal failure in young patients → **suspicion of medullary cystic disease**			2. Medullary sponge kidney (**MORE COMMON- INNOCENT)**