MEDICATIONS: GASTROINTESTINAL Primary Care Paramedicine

Module: 17

Section: 04





Acute Renal Failure

- Abrupt and often reversible decline in glomerular filtration rate
- Majority of community cases caused by volume depletion
- Causes of non-socomial ARF
 - Sepsis, exposure to nephrotic medications

Pre - renal	Volume depletion i.e. shock
Renal	Nephrotoxic drugs, infection, autoimmune
Post - renal	Obstruction i.e. stones



Chronic Kidney Disease Stages

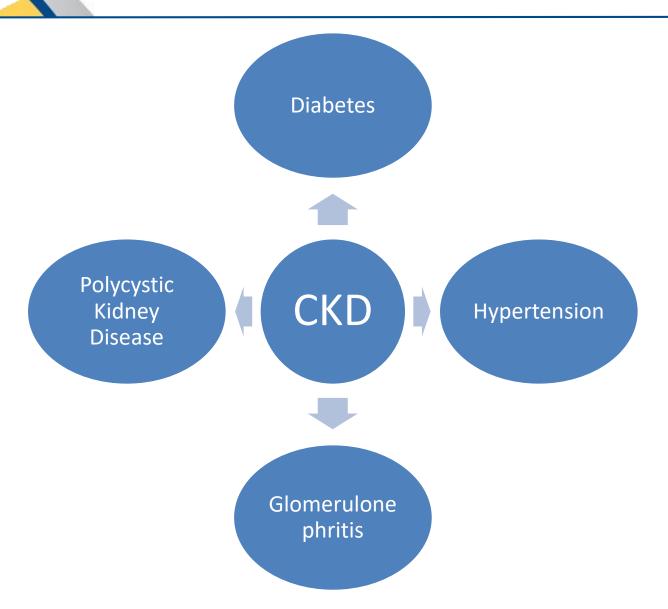
Table 10. Stages of Chronic Kidney Disease

Stage	Description	GFR (mL/min/1.73 m ²)
1	Kidney damage with normal or ↑ GFR	≥90
2	Kidney damage with mild ↓ GFR	60–89
3	Moderate ↓ GFR	30–59
4	Severe ↓ GFR	15–29
5	Kidney failure	<15 (or dialysis)

Chronic kidney disease is defined as either kidney damage or GFR <60 mL/min/1.73 m² for ≥3 months. Kidney damage is defined as pathologic abnormalities or markers of damage, including abnormalities in blood or urine tests or imaging studies.



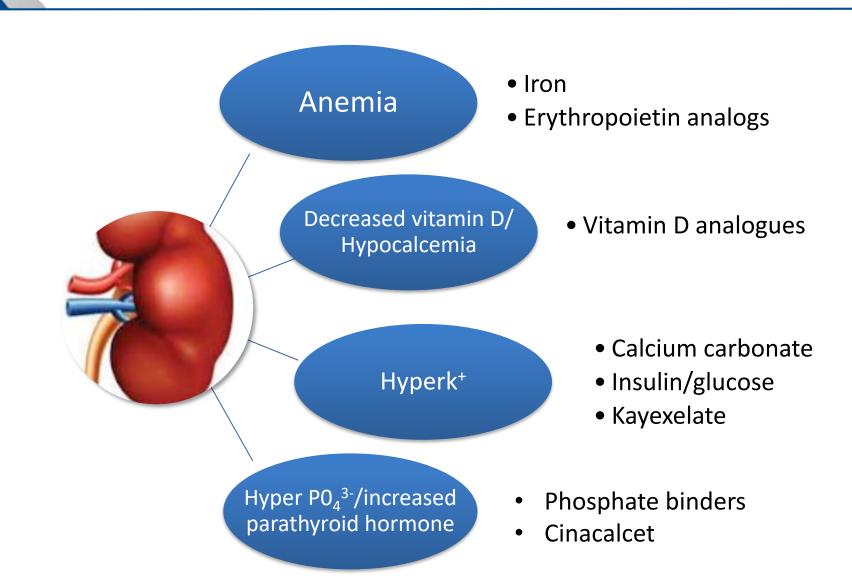
Causes of CKD





Chronic Renal Failure Sequalae

Many medications have to be dosed renally





Urinary Tract Infection

Complicated

Recurrent/Reinfection/Relapse

Uncomplicated

Upper (pyelonephritis) and lower (cysitis & urethritis)



UTI medications

Medication	Notes and concerns
Nitrofurantoin	5 day course, can discolor urine (dark brown)
Septra (sulfamethoxazole/trimethoprim)	3 day course, concerns with sulfa allergies
Trimethoprim	3 day course
Fosfomycin	1 dose mixed in with cold water, less bacterial coverage
Amoxicillin	7 days, second line therapy
Ciprofloxacin, norfloxacin, levofloxacin	Broad spectrum, used for complicated therapy, should be reserved
IV gentamicin and ampicillin IV ciprofloxacin, norfloxacin, levofloxacin	Severe pyelonephritis