

Renal tubular inhibitory diuretics

CAI	Thiazide or thiazide-like diuretics	Loop diuretics	K sparing diuretics
Decreases H ⁺ and Na ion exchange so Na remains in lumen and gets excreted with HCO ₃ ⁻ and water.	In mild HTN alone or in edema caused by nephritic syndrome, liver cirrhosis, HF		Excrete Na & Cl without K, which may lead to hyperkalemia--cardiac risk.
Drug design concept originates from anti-bacterial sulfanilamide (weak CAI)			
Two groups:			
1. Heterocyclic sulfonamides; Acetazolamide , Methazolamide	Hydrochlorothiazide or Indapamide ; thiazide like	Furosemide; Azosemide; Ethacrynic acid	Spironolactone; hormonal SE; Amiloride: less hormonal SE; Triamterene
2. Metadisulfamoyl benz deriv.; Dichlorphenamide, Chloraminophenamide			
NOT given to sulpha-allergic patients: CAI- Thiazide Diuretics- Loop diuretics except ethacrynic a'			

Osmotic diuretics

Given in high concentrations to increase osmotic pressure in urine and increase its secretion into urine along with water.

Decreases IOP

1. Glycerine/glycerol
2. Mannitol: **Taken IV**; Safe on kidney so for renal function diagnosis, acute renal failure or cerebral edema
3. Sorbitol (D-glucitol)/Isosorbide

Vasodilators

Hydralazine HCl	Sodium nitroprusside	K channel agonists
Best in combination to avoid individual increase in dose leading to unwanted SE.	Indicated for hypertensive emergencies (very potent VD)	Diazoxide: IV for emergency BP lowering in hospitalized pt.

Minoxidil: for severe HTN and alopecia.

Sympatholytic

<i>Affects central nerves:</i>	<i>Affects peripheral nerves:</i>
a-methyl dopa	Reserpine, guanethidine; deplete NT store
Clonidine	Prazosin: α_1 antagonist
	Propranolol, atenolol: B blockers

RAS inhibitors

ACEI	ARBs
Captopril: thiol gp attaches to Zn of the metalloenzyme and responsible for SE urticaria or rash	Candesartan: Prodrug that gives free acid from hydrolysis of ethyl ester
Gen2 (prodrugs): Lisinopril, Quinapril, Enalapril	Losartan (non-peptide imidazole): Orally active, potent, selective to AT1 on angiotensin II receptor.
No thiol gp. . Long acting ACEI.	Valsartan

