

Diuretics

| Class of Drug | Actions | Uses | Side Effects | Nursing Implications |
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| <p style="text-align: center;">Thiazide & Thiazide-like</p> <p>Hydrochlorothiazide Chlorothiazide Chlorothalidone Quinethazone Indapamide</p> | <ul style="list-style-type: none"> - Inhibits Na & Cl reabsorption in the distal tubule - Has longer duration of action than loop diuretics | <ul style="list-style-type: none"> - Mild edema - Essential hypertension | <ul style="list-style-type: none"> - Orthostatic hypotension - K & Cl depletion - Hyperuricemia (decr. excretion) - Hypercalcemia when taking Ca supplements - Anorexia, N/V, general GI - Glucose intolerance - Dry mouth, thirst - Weakness, lethargy, muscle cramps - Decreased excretion of Li - Increased dysrhythmia | <ul style="list-style-type: none"> - Teach about signs of hypokalemia: <i>anorexia, nausea, lethargy & mental confusion, muscle weakness, cardiac arrhythmias</i> - Teach management of orthostatic hypotension <p>Drug/Drug Interactions (DDIs): EtOH, oral hypoglycemics, insulin, antihypertensives can cause hypotension</p> |
| <p style="text-align: center;">Loop Diuretics</p> <ul style="list-style-type: none"> - Highly protein bound <p><u>furosemide (LASIX)</u> - Sulfonamide derivative</p> <p><u>torsemide (DEMADEX)</u> - Sulfonamide derivative - Longer half-life so q day dosing</p> <p><u>bumetanide (BUMEX)</u> - Sulfonamide derivative - More potent than furosemide - Decr. incidence of hyperglycemia</p> <p><u>ethacrynic acid (EDECIN)</u> - NOT related to sulfonamides - Decr. incidence of GI disturbances - Decr. incidence of hyperglycemia</p> | <ul style="list-style-type: none"> - Blocks reabsorption of Na by inhibiting Na/K/2Cl pump in the ascending loop | <ul style="list-style-type: none"> - Edema - Hypertension (pts with decreased renal blood flow) - CHF (adjunct to digoxin) - Renal & hepatic dysfunction | <ul style="list-style-type: none"> - Increased excretion Na, K, Cl, H, Ca - Arrhythmias due to electrolyte depletion - Excessive diuresis - Weakness, lethargy, dizziness - Transient hearing loss - Orthostatic hypotension - Abdominal pain, diarrhea, anorexia - Impaired glucose tolerance - Decreased excretion of Li - Incontinence | <ul style="list-style-type: none"> - Assess for allergy to sulfonamides (w/ furosemide, torsemide, bumetanide) - Teach about signs of hypokalemia - K supplementation - Assess for dehydration: urine color, I & O, mucous membranes, increased HR - Schedule dose in the morning - Lab monitoring: K, Na & PT/INR if on Coumadin - Avoid switching brands (bioavailability) <p>Drug/Drug Interactions (DDIs): (Lasix) digitalis, corticosteroids, lithium, sulfonylureas, warfarin, decreased absorption w/ food</p> |
| <p style="text-align: center;">Potassium Sparing</p> <p><u>spironolactone (ALDACTONE)</u> - Keep in dark container - Agranulocytosis SE: Hirsutism, menstrual irregularities, gynecomastia in men</p> <p><u>triamterene (DYTAC)</u> - Urine may turn blue - Agranulocytosis, thrombocytopenia - Photosensitivity rxns</p> <p><u>amiloride (MIDAMOR)</u> - Excreted unchanged in urine - Aplastic anemia, neutropenia</p> | <ul style="list-style-type: none"> - Antagonist of aldactone: inhibits pump that exchanges K for Na in distal tubule - Reduces Na reabsorption while retaining K & H | <ul style="list-style-type: none"> - Hyperaldosteronism (spironolactone) - Edema in CHF - Cirrhosis of liver - Hypertension - Hypokalemia: helps retain K (Used as adjunct therapy, seldom used alone) | <ul style="list-style-type: none"> - Hyperkalemia - Hypotension - GI Upset: nausea/vomiting - Increases Li reabsorption - Weakness, fatigue | <ul style="list-style-type: none"> - Teach to avoid high K foods: prunes, potatoes, raisins, dates, bananas - Teach S/Sx of hyperkalemia - Monitor other meds with K <p>Contraindicated:</p> <ul style="list-style-type: none"> - Pts w/ renal insufficiency (inc. hyperkalemia potential) - Pts on other K-sparing drugs (inc. hyperkalemia potential) <p>Drug/Drug Interactions (DDIs): ACE inhibitor, K supplements (increased K levels)</p> |