

ACTIVE LEARNING TEMPLATE: *Furosemide*

STUDENT NAME __Allison Martin

CATEGORY CLASS __Loop Diuretics

PURPOSE OF MEDICATION

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Expected Pharmacological Action

Inhibits the reabsorption of sodium and chloride, increases the renal excretion of water, sodium, chloride, magnesium, potassium, and calcium

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Therapeutic Use

Treats pulmonary edema in heart failure, treats edema caused by cardiac failure, treats hypertension

Complications

Electrolyte imbalance, hypotension, severe fluid loss, ototoxicity, hyperglycemia, increased uric acid levels

Medication Administration

Give oral form with food, don't take close to bed time to prevent nocturia, give IV form slowly to prevent ototoxicity, Protect all forms from light.

Contraindications/Precautions

Allergies to furosemide, hepatic coma, electrolyte imbalance, anuria, diabetes mellitus, pregnancy, renal or hepatic disorders

Nursing Interventions

Monitor serum electrolytes, monitor for electrolyte imbalance, monitor dysrhythmia, monitor BP, monitor blood glucose

Interactions

High risk for digoxin toxicity, NSAIDs decrease diuretic effect, lithium toxicity can occur, corticosteroids increase risk for hypokalemia

Client Education

Eat foods rich in potassium, report signs of electrolyte imbalances, monitor BP frequently, report dizziness, syncope, hearing loss, tinnitus to HCP, monitor blood glucose

Evaluation of Medication Effectiveness

Decrease in edema, decrease in BP

ACTIVE LEARNING TEMPLATE: *Nitroglycerin*

CATEGORY CLASS __nitrates

PURPOSE OF MEDICATION

Expected Pharmacological Action

Increase coronary blood flow by dilating coronary arteries, reduces myocardial oxygen consumption

Therapeutic Use

Treatment of prophylaxis of angina pectoris, IV form used for severe unstable angina attacks to control blood pressure perioperatively, and to treat heart failure after acute MI

Complications

Headache, orthostatic hypotension, tachycardia, tolerance develops quickly to all forms

Medication Administration

IV form infused continuously in a glass bottle with special tubing, place sublingual tablets under tongue to dissolve if not relieved in 5 minutes call 911 and take another

Contraindications/Precautions

Allergy, pregnancy, increased icp, anemia, hypovolemia, head trauma, glaucoma, cardiomyopathy, liver disease, early MI

Nursing Interventions

Avoid touching ointment when applying, monitor length and severity of headache, monitor baseline BP and pulse, monitor for drug tolerance

Interactions

Increased hypotension may result when used with antihypertensive drugs or alcohol, Viagra may cause severe hypotension

Client Education

Take OTC analgesics for headache, report dizziness and syncope to HCP, sit/stand up slowly, report tachycardia

Evaluation of Medication Effectiveness

Decrease in frequency and severity of anginal attacks, controlled hypotension during surgical procedures, treatment of HF associated with acute MI

ACTIVE LEARNING TEMPLATE: *Milrinone*

CATEGORY CLASS *inotropics*
PURPOSE OF MEDICATION

Expected Pharmacological Action

Decrease myocardial contractility, decrease preload and after load by a direct dilating effect on vascular smooth muscle

Therapeutic Use

Short-term treatment of low cardiac output in heart failure

Complications

Hypokalemia, cardiac dysrhythmias, hypotension, anginal chest pain

Medication Administration

Only available in IV infusion, give a loading dose over 10 minutes and then administer a dose based on patients weight by continuous infusion, use dedicated IV line if possible

Contraindications/Precautions

Allergy, aortic or pulmonary valve disorder, acute MI, renal impairment, afib, older adults

Nursing Interventions

Correct fluid deficits, monitor potassium levels, monitor VS and heart rhythm, monitor for chest pain

Interactions

Disopyramide may cause severe hypotension, incompatible in solution with furosemide and procainamide

Client Education

Lab monitoring will occur before, during, and after treatment, VS and ECG monitoring continuously during treatment, report chest pain during infusion to staff

Evaluation of Medication Effectiveness

Decrease in signs and symptoms of HF