

**Nursing Process Focus:
Patients Receiving Digoxin (Lanoxin)**

<p>Assessment</p> <p>Prior to administration:</p> <ul style="list-style-type: none"> Assess for shortness of breath, peripheral edema, pulmonary edema (initially and throughout therapy) Obtain complete medical history including allergies, especially cardiac, hypertensive, liver, hematological, pulmonary diseases including blood studies: CBC with differential for blood dyscrasias, liver function tests, electrolytes, BUN, creatinine, arterial blood gases. 	<p>Potential Nursing Diagnoses</p> <ul style="list-style-type: none"> Tissue perfusion, Ineffective related to decreased cardiac contractility Fluid volume, Excess related to inadequate drug therapy Knowledge deficient, related to drug action and side effects
<p>Planning: Patient Goals and Expected Outcomes</p>	
<p>The patient will:</p> <ul style="list-style-type: none"> Experience relief of symptoms related to fluid overload. Demonstrate evidence of improved organ perfusion, including kidney, heart and brain. Demonstrate expected outcomes of drug therapy and list reportable side effects 	
<p>Implementation</p>	
<p>Interventions and (Rationales)</p>	<p>Patient Education/Discharge Planning</p>
<ul style="list-style-type: none"> Observe for side effects such as nausea, vomiting, diarrhea, anorexia, shortness of breath, vision changes, leg muscle cramps 	<ul style="list-style-type: none"> Instruct patient to signs and symptoms of side effects and to report side effects to health care provider
<ul style="list-style-type: none"> Monitor apical-radial pulse for a full minute prior to every administration of medication. Monitor ECG for rate and rhythm changes during initial digitalization therapy. (Serious cardiac dysrhythmias may occur during initial therapy.) 	<p>Instruct patient to:</p> <ul style="list-style-type: none"> Count pulse for a full minute and record pulse with every dose. Contact prescriber if pulse rate is less than 60 or greater than 100. Report changes in cardiac rhythm
<ul style="list-style-type: none"> Monitor patient's cardiac rhythm. (If given for atrial fibrillation, report pulse below 60 or above 110, skipped beats or change if rhythm to health care provider.) 	<ul style="list-style-type: none"> Instruct patient to report pulse findings and rhythm irregularities to health care provider.
<ul style="list-style-type: none"> Weigh patient daily. (Weight increase or decrease is an indicator of worsening or improvement of medical condition.) 	<ul style="list-style-type: none"> Instruct patient to report weight gain of 2 lb. per day.
<ul style="list-style-type: none"> Monitor serum drug level to determine therapeutic concentration and toxicity. Report serum drug levels > 1.8 to health care provider. 	<ul style="list-style-type: none"> Instruct patient to report to laboratory as scheduled by health care provider as directed and for ongoing drug level determinations.
<ul style="list-style-type: none"> Monitor levels of potassium, magnesium and calcium, BUN, creatinine. (Impaired 	<p>Instruct patient to:</p> <ul style="list-style-type: none"> Report changes in urinary output

renal function may contribute to drug toxicity.)	<ul style="list-style-type: none"> • Keep appointment for followup lab studies
<ul style="list-style-type: none"> • Monitor for signs and symptoms of digoxin toxicity. (There is a narrow margin of drug levels.) 	<ul style="list-style-type: none"> • Instruct patient to immediately report visual changes, mental depression, palpitations, weakness, and loss of appetite, vomiting and diarrhea.
<p>Evaluation of Outcome Criteria</p> <p>Evaluate the effectiveness of drug therapy by confirming that the patient goals and expected outcomes have been met (see “Planning”).</p>	

Nursing Process Focus:

Patients Receiving Lisinopril (Prinivil, Zestoric)

<p align="center">Assessment</p> <p>Prior to administration:</p> <ul style="list-style-type: none"> • Assess for excessive sweating, s/s of dehydration, edema of lower extremities, diarrhea, vomiting (initially and throughout therapy) • Obtain complete medical history including allergies, especially renal, thyroid disease, salt restricted diet, use of diuretic, severe salt/volume depletion, coronary insufficiency, leukemia : CBC with differential, BUN/creatinine, electrolytes, serum/urine protein, glucose • Obtain patient’s drug history to determine possible drug interactions and allergies. 	<p align="center">Potential Nursing Diagnoses</p> <ul style="list-style-type: none"> • Fluid volume, Excess related to disease process • Fluid volume, deficit related to effects of drug therapy • Injury, Risk for related to hypotension • Protection, Ineffective, related to agranulocytosis or neutropenia • Knowledge Deficient, related to drug action and side effects
<p align="center">Planning: Patient Goals and Expected Outcomes</p> <p>The patient will:</p> <ul style="list-style-type: none"> • Demonstrate relief of dyspnea • Demonstrate an increase in activity tolerance • Maintain a decrease in peripheral edema • Exhibit expected outcome of drug therapy and list reportable side effects 	
<p align="center">Implementation</p>	
<p>Interventions and (Rationales)</p>	<p>Patient Education/Discharge Planning</p>
<ul style="list-style-type: none"> • Observe for side effects such as orthostatic hypotension, persistent, dry irritating cough, swelling of face, eyes, lips, tongue, arms or legs, difficulty breathing or swallowing, syncope, fever, sore throat and hoarseness. Report immediately 	<ul style="list-style-type: none"> • Instruct patient to report: persistent, dry cough; indications of infections; swelling of face, mouth; difficulty breathing; headache, dizziness; nausea, vomiting, diarrhea.
<ul style="list-style-type: none"> • Use with caution in patients with salt or volume deficit, or renal disease (may lead to increased drug levels). 	<ul style="list-style-type: none"> • Instruct patient to report changes in urinary output.
<ul style="list-style-type: none"> • Use with caution in patients taking potassium supplements, potassium sparing diuretics or lithium. (May cause hyperkalemia) 	<ul style="list-style-type: none"> • Inform patient of importance to report all medication including OTC and herbal supplements
<ul style="list-style-type: none"> • Monitor serum levels of lithium if patient is receiving lithium. 	<ul style="list-style-type: none"> • Instruct patient that ACE inhibitor may increase serum level of lithium.
<ul style="list-style-type: none"> • Monitor for effectiveness of drug. (A decrease in dyspnea, edema or jugular distention indicate improvement in medical condition.) 	<ul style="list-style-type: none"> • Inform patient of signs and symptoms of positive therapeutic effect.

<ul style="list-style-type: none">• Observe for dizziness during first few days of therapy. (May cause drop in blood pressure, especially with diuretic therapy).	Instruct patient to: <ul style="list-style-type: none">• Avoid driving or operating dangerous machinery until effects of drug are known• Change positions slowly to prevent injury
<p style="text-align: center;">Evaluation of Outcome Criteria</p> <p>Evaluate the effectiveness of drug therapy by confirming that patient goals and expected outcomes have been met (see “Planning”).</p>	

Nursing Process Focus:
Patients Receiving Isosorbide Dinitrite (Isordil, Sorbitrate, Dilatrate)

<p>Assessment Prior to administration:</p> <ul style="list-style-type: none"> • Assess for tachycardia, dysrhythmias, reduced exercise intolerance, dyspnea, orthopnea, paroxysmal nocturnal dyspnea, peripheral edema, and weight gain (initially and throughout therapy) • Obtain complete medical history including allergies, especially coronary artery disease, rheumatic heart disease, pregnancy, impaired renal function, CVA diseases including blood studies: CBC with diff, ANA titers, electrolytes, renal functions, and urinalysis. • Obtain patient's drug history to determine possible drug interactions and allergies 	<p>Potential Nursing Diagnoses</p> <ul style="list-style-type: none"> • Activity intolerance related to compromised oxygen transport system • Fatigue secondary to cardiac failure • Knowledge deficient of self-care program related to nonacceptance of lifestyle modifications • Pain related to headache
<p style="text-align: center;">Planning: Patient Goals and Expected Outcomes</p> <p>The patient will:</p> <ul style="list-style-type: none"> • Exhibit an increase in activity tolerance • Demonstrate decrease in shortness of breath related to activity • Maintain a normal blood pressure • Demonstrate expected outcomes of drug therapy and list reportable side effects. 	
<p style="text-align: center;">Implementation</p>	
<p>Interventions and (Rationales)</p>	<p>Patient Education/Discharge Planning</p>
<ul style="list-style-type: none"> • Check other medications taken because Isosorbide Dinitrite is contraindicated if patient is taking sildenafil. (If drug is taken serious and potentially fatal hypotension may result.) 	<ul style="list-style-type: none"> • Instruct patient to report all drugs taken.
<ul style="list-style-type: none"> • Observe for side effects such as blurred vision, dryness of mouth, hypotension, lupus-like reaction (fever, facial rash, muscle and joint aches, enlarged liver), anorexia, peripheral edema of hands and feet, bluish-color lips, fingernails, and/or palms of hands, headache, shortness of breath, weak and slow heartbeat. Report immediately. 	<p>Instruct patient to:</p> <ul style="list-style-type: none"> • Report side effects. • Avoid alcohol while taking this drug. • Rise and change position slowly. • Record the pulse daily and notify health care provider if pulse is 20 or > beats per minute. • Report any weight gain 2lbs or >. • To decrease nausea, take unsalted crackers as needed.
<ul style="list-style-type: none"> • Use cautiously in head trauma or cerebral hemorrhage. (May put patient at high risk for reduced blood flow to vital organs.) 	<ul style="list-style-type: none"> • Instruct patient to report changes in sensorium, symptoms of stroke to the health care provider.

<ul style="list-style-type: none"> • Inform patient that headache is a common side effect. 	<p>Inform patient:</p> <ul style="list-style-type: none"> • Headache should subside with time. • Health care provider may prescribe aspirin or acetaminophen for persistent headache.
<ul style="list-style-type: none"> • Provide guidelines for physical activity. (Exercise, hot weather or prolonged standing may result in dizziness or fainting.) 	<p>Instruct patient to:</p> <ul style="list-style-type: none"> • Use caution when exercising during extreme heat, • Avoid standing for long periods of time
<p style="text-align: center;">Evaluation of Outcome Criteria</p> <p>Evaluate the effectiveness of drug therapy by confirming that patient goals and expected outcomes have been met (see “Planning”).</p>	

**Nursing Process Focus:
Patients Receiving Furosemide (Lasix)**

<p>Assessment Prior to administration:</p> <ul style="list-style-type: none"> • Assess for sites and amount of edema, blood pressure, pulse, and weight gain/loss (initially and throughout therapy). • Obtain complete medical history including allergies, heart failure, especially kidney and liver disease, diabetes, gout, pancreatitis, ascites, including blood studies: electrolytes, BUN, creatinine, uric acid, liver function tests. 	<p>Potential Nursing Diagnoses</p> <ul style="list-style-type: none"> • Fluid excess related to impaired cardiac function and output • Urinary elimination, impaired related to diuretic therapy • Knowledge deficient, related to drug action and side effects
<p style="text-align: center;">Planning: Patient Goals and Expected Outcomes</p> <p>The patient will:</p> <ul style="list-style-type: none"> • Demonstrate a decrease in weight • Exhibit a decrease in peripheral edema • Exhibit expected outcomes of diuretic therapy and list reportable side effect. 	
<p style="text-align: center;">Implementation</p>	
<p>Interventions and (Rationales)</p>	<p>Patient Education/Discharge Planning</p>
<ul style="list-style-type: none"> • Observe for side effects such as muscle cramps, weakness, dizziness, confusion, nausea, vomiting, diarrhea, headache, restlessness, and constipation. Report immediately. 	<ul style="list-style-type: none"> • Instruct the patient regarding the side effects and to report them immediately to the health care provider.
<ul style="list-style-type: none"> • Contraindicated with history of hypersensitivity to drug or sulfonamides. 	<ul style="list-style-type: none"> • Instruct patient to give history of any drug allergies or reactions to health care provider
<ul style="list-style-type: none"> • Use with caution for severe liver disease with cirrhosis or ascites. (Increases risk of drug toxicity.) 	<p>Instruct patient:</p> <ul style="list-style-type: none"> • Signs and symptoms of liver disease • Immediately report symptoms to health care provider
<ul style="list-style-type: none"> • Provide information related to appropriate administration time (to avoid nocturia). 	<ul style="list-style-type: none"> • Instruct patient to schedule dose in morning, and not after 6pm if two times a day dose is ordered.
<ul style="list-style-type: none"> • Monitor blood count, serum electrolytes, BUN, blood sugar and uric acid when therapy initiated and periodically during therapy. 	<ul style="list-style-type: none"> • Instruct patient to report for laboratory tests as scheduled to ensure safe treatment plan.
<p style="text-align: center;">Evaluation of Outcome Criteria</p> <p>Evaluate the effectiveness of drug therapy by confirming that patient goals and expected outcomes have been met (see “Planning”).</p>	

**Nursing Process Focus:
Patients Receiving Milrinone (Primacor)**

<p>Assessment</p> <p>Prior to administration:</p> <ul style="list-style-type: none"> • Assess for supraventricular and ventricular dysrhythmias, hypotension, and fluid electrolyte balance (initially and throughout therapy) • Obtain complete medical history including allergies, especially cardiac, renal disease including blood studies: CBC, WBC with differential to monitor for infection, electrolytes, BUN, creatinine. • Obtain patient's drug history to determine possible drug interactions and allergies. Assess for recent diuretic therapy 	<p>Potential Nursing Diagnoses</p> <ul style="list-style-type: none"> • Cardiac output, Decreased related to severe congestive heart failure • Gas exchange, impaired related to heart failure • Knowledge deficient, related to drug action and side effects
<p>Planning: Patient Goals and Expected Outcomes</p>	
<p>The patient will:</p> <ul style="list-style-type: none"> • Exhibit normal sinus rhythm without dysrhythmias during drug therapy. • Demonstrate a decrease in symptoms of disease process. • Demonstrate the expected outcomes of drug therapy and list reportable side effects. 	
<p>Implementation</p>	
<p>Interventions and (Rationales)</p>	<p>Patient Education/Discharge Planning</p>
<ul style="list-style-type: none"> • Observe for side effects such as headache, increased heart rate, nausea, vomiting, shortness of breath, pounding headache, faintness, dizziness, leg cramps. 	<ul style="list-style-type: none"> • Instruct the patient to report all side effects, immediately to the health care provider
<ul style="list-style-type: none"> • Monitor cardiac status and blood pressure during and following administration. (Drug may cause hypotension.) 	<ul style="list-style-type: none"> • Instruct patient signs and symptoms of angina and to report immediately if experienced.
<ul style="list-style-type: none"> • Monitor fluid and electrolyte balance. (Hypokalemia must be treated before drug administration.) 	<p>Instruct patient:</p> <ul style="list-style-type: none"> • Signs and symptoms of hypokalemia • To report signs and symptoms to the health care provider
<ul style="list-style-type: none"> • Monitor electrolytes and renal function. (Previous intense diuretic therapy increases risk of hypotension. Dosage reduced for patient with renal impairment.) 	<ul style="list-style-type: none"> • Instruct patient to report changes in urinary output to the health care provider.
<ul style="list-style-type: none"> • Encourage adherence to treatment regimen 	<p>Instruct patient to:</p> <ul style="list-style-type: none"> • Continue low-sodium diet and daily exercise program as prescribed

	<ul style="list-style-type: none">• Carefully follow prescribed plan of care for maximum therapeutic effects.
<ul style="list-style-type: none">• Monitor platelet count.	<ul style="list-style-type: none">• Instruct patient to report signs of unusual bleeding, bruising.
<p style="text-align: center;">Evaluation of Outcome Criteria</p> <p>Evaluate the effectiveness of drug therapy by confirming that patient goals and expected outcomes have been met (see “Planning”).</p>	

Nursing Process Focus:

Patients Receiving Carvedilol (Coreg)

<p align="center">Assessment</p> <p>Prior to administration:</p> <ul style="list-style-type: none"> Assess for heart rate and blood pressure (initially and throughout therapy) Obtain complete medical history, especially pulmonary, cardiovascular, diabetes, kidney, liver, thyroid diseases including blood studies: BUN, creatinine, liver enzymes, TSH, T3 and T4, glucose, electrolytes, blood gases and 12 lead EKG. Obtain patient's drug history to determine possible drug interactions and allergies. 	<p align="center">Potential Nursing Diagnoses</p> <ul style="list-style-type: none"> Activity intolerance related to imbalance between oxygen demand and supply. Knowledge deficient related to drug therapy.
<p align="center">Planning: Patient Goals and Expected Outcomes</p> <p>The patient will:</p> <ul style="list-style-type: none"> Demonstrate relief of dizziness or light-headedness. Exhibit lessening symptoms of cardiac failure Demonstrate expected outcomes of drug therapy and list reportable side effects. 	
<p align="center">Implementation</p>	
<p align="center">Interventions and (Rationales)</p>	<p align="center">Patient Education/Discharge Planning</p>
<ul style="list-style-type: none"> Observe for side effects such as fainting, difficulty breathing, weight gain, abdominal pain, slow, irregular heartbeat, changes in blood sugar levels, dry mouth, sore throat, fever, cough, dry eyes. Report immediately. 	<p>Instruct the patient to:</p> <ul style="list-style-type: none"> Report the side effects immediately to health care provider. Take drug with food to slow absorption. To use wetting agents if wearing contact lenses
<ul style="list-style-type: none"> Monitor blood pressure and pulse frequently with dosage changes. 	<p>Teach patient and family to:</p> <ul style="list-style-type: none"> Take pulse and blood pressure. Notify health care provider if pulse rate is less than 50.
<ul style="list-style-type: none"> Monitor blood glucose in patients with diabetes mellitus. (Drug may increase hypoglycemic agent effect.) 	<p>Advise patient to:</p> <ul style="list-style-type: none"> Adhere to blood glucose monitoring schedule. Report low blood glucose levels to health care provider
<ul style="list-style-type: none"> Monitor intake and output, weight and dyspnea. (To determine effectiveness of drug therapy and possible worsening of condition) 	<p>Teach patient:</p> <ul style="list-style-type: none"> Signs of worsening heart failure and to report signs of worsening heart failure to the health care provider
<ul style="list-style-type: none"> Monitor for dizziness and lightheadedness. 	<p>Instruct patient to:</p> <ul style="list-style-type: none"> Change position to standing slowly. Lie down or sit down if dizzy. Take with food to slow absorption.

<ul style="list-style-type: none">• Encourage compliance to drug regimen.	Inform patient: <ul style="list-style-type: none">• Stopping medication suddenly can worsen HF symptoms.• Do not stop medication if feeling well.• To take exactly as prescribed.
---	---

Evaluation of Outcome Criteria

Evaluate the effectiveness of drug therapy by confirming that patient goals and expected outcomes have been met (see “Planning”).