

PROTOCOL FOR: Congestive Heart Failure (CHF): Care of the Patient with CHF

DESIRED PATIENT

- OUTCOMES:
1. Patient will maintain adequate perfusion.
  2. Patient will exhibit improved oxygenation.
  3. Patient will achieve/maintain desired dry weight by discharge.
  4. Patient will demonstrate/verbalize understanding of disease process, disease management, and self-assessment skills.

CLINICAL  
ASSESSMENT/  
AND CARE:

A. General:

1. Patient will be assessed every 2 to 4 hours or per LIP order and PRN utilizing cardiovascular/respiratory assessment skills and subjective complaints of the patient.
  - a. Objective signs seen mainly in left heart failure: tachypnea, cough (dry, non-productive), hemoptysis, tachycardia, dysrhythmias, S3, S4, hypoxemia, cyanosis, crackles, rhonchi, ↓ breath sounds, hypo/hypertension.
  - b. Subjective complaints associated with left heart failure: dyspnea, orthopnea, paroxysmal nocturnal dyspnea, fatigue, anxiety.
  - c. Objective signs seen in right heart failure: peripheral edema, sacral edema, genital edema, ascites, anasarca, JVD, weight gain.
  - d. Subjective complaints in right heart failure: abdominal/RUQ fullness (due to liver engorgement), bloating, pain, anorexia, weight gain, generalized puffiness, SOB, fatigue, anxiety, orthopnea.
2. Common assessment findings in either left or right heart failure: fatigue, anorexia, nocturia, anxiety, orthopnea, restlessness, confusion, hoarseness, pleural effusions, sweaty/cool extremities, pulsus alternans, nausea/vomiting.
3. Assess color, consistency, frequency of sputum production every 2 to 4 hours or per LIP order and PRN.
4. Evaluate c/o dyspnea as to when it is noted in association with activity, rest, or if awakens patient from sleep.

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5. Assess BP every 2 to 4 hours or per LIP order, assess for lowered systolic pressure and narrowing of pulse pressure.
6. Assess peripheral arterial pulses every 2 to 4 hours or per LIP orders, note alternations in strong and weak pulsations (pulsus alternans).
7. Monitor Central Venous Pressure (CVP) and/or PCWP every 2-4 hours, if applicable.
8. If started on Warfarin, initiate referral to Anticoagulation Clinic.
9. Maintain continuous ECG monitoring as ordered and document per unit protocol as appropriate.

B. Fluid Balance:

1. Monitor and record intake and output (I & O) q shift or per LIP orders.
2. Obtain and record daily weights.
3. Monitor lab results for electrolyte abnormalities, BUN and creatinine.
4. Maintain fluid restriction if ordered.
5. Administer diuretics as ordered and observe for side effects:
  - a. hypokalemia and hyponatremia
  - b. hypovolemia
  - c. lethargy
  - d. postural hypotension
  - e. muscle cramps
  - f. metabolic alkalosis

C. Gas Exchange:

1. Initiate actions to decrease patient's anxiety.
2. Place patient in mid-high Fowler's position with legs dependent.

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3. Administer morphine, diuretics, inotropes and vasodilators as ordered.
4. Obtain and monitor ABGs and pulse oximetry as ordered.
5. Administer O<sub>2</sub> as ordered - titrate per LIP order.
6. Encourage deep breathing exercises and use of incentive spirometer every 2 hours, as ordered.
7. Observe for altered respiratory patterns.
8. Observe/report new onset of cough.
  - a. Maintain continuous ECG Monitoring as ordered and document per unit protocol as appropriate.

D. Medication Therapy:

1. Monitor lab results for hypoxia, electrolyte disturbances, acidosis/alkalosis, serum digoxin, and/or antidysrhythmic agent levels.
2. Assess and document effect of new medications on perfusion and heart failure. ACE inhibitors will reduce afterload and therefore reduce blood pressure. Beta blockers will improve diastolic but will lower HR and BP. Positive inotropes may be used to increase C.O. and decrease afterload.
3. Treat dysrhythmias as per unit protocol; notify LIP immediately.
4. Administer ace inhibitors, digoxin and/or antidysrhythmic agents as ordered. LIP must specify if monitor is necessary when starting Digoxin.
5. Assess for toxic digoxin effects: dysrhythmias, anorexia, nausea, vomiting, diarrhea, bradycardia, headache, visual changes, malaise, behavioral changes, increasing CHF.

PATIENT

TEACHING:

1. Explain disease process to patient, family and/or significant other, emphasizing the difference between heart attack and CHF.

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2. Teach signs and symptoms of recurrence: weight gain, swelling of feet, ankles or abdomen, persistent cough, tiredness, loss of appetite, frequent urination at night.
3. Review medication regimen. Validate patient/family understanding of medications. Distribute handouts as appropriate on all discharge medications.
4. If patient is on diuretic therapy, suggest patient weigh self daily and keep a log.
5. Review activity program:
  - a. Gradual increase in walking and other activities.
  - b. Avoid excesses in eating and drinking.
  - c. Avoid extremes in heat and cold. These can increase the work of the heart; air conditioning may be essential in a hot, humid environment.
6. Initiate CHF PFTR.
7. Review diet restrictions:
  - a. Provide rationale for Na restriction.
  - b. Encourage small frequent meals versus 3 large meals/day.
  - c. Consult dietary to provide patient with sample menus.
  - d. Advise patient to look at all labels to ascertain Na content, including medications.
  - e. Advise the patient to avoid salt substitutes in the presence of renal disease.
  - f. If on anticoagulation, review possible diet restriction/interactions.

REPORTABLE

CONDITIONS:

1. Signs/symptoms of respiratory distress/ ↓ output state.
2. Any abnormal lab findings and changes from patient's baseline vital signs.
3. Notify LIP if antidysrhythmic agents are given as an emergency, and patient's response.

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APPROVAL: ICU Standards Committee  
Nursing Standards Committee  
Med-Surg Standards Committee

EFFECTIVE DATE: 2/89

REVISION DATES: 2/90, 10/90, 12/90, 1/92, 1/93, 4/94, 8/94, 1/95, 8/96, 3/98,  
9/99, 9/00, 5/03, 9/05