Observation Heart Failure

Diet
- 2-3GM NA, LOW FAT, LOW CHOL DIET, Fluid restrictions 1000 milliliter/day
- 2-3GM NA, LOW FAT, LOW CHOL DIET, Fluid restrictions 1500 milliliter/day
- 2gm NA LOFAT/CHOL & CCD, Fluid restrictions 1000 milliliter/day
- 2gm NA LOFAT/CHOL & CCD, Fluid restrictions 1500 milliliter/day

Medications

Aldosterone Antagonists
- Serum potassium levels should be monitored frequently after initiation or change in aldosterone antagonist therapy
- spironolactone
  - 12.5 milligram orally once a day
  - 25 milligram orally once a day
  - 50 milligram orally once a day

Angiotensin-Converting Enzyme Inhibitors
- For patients without contraindications or hemodynamic instability, an ACE inhibitor should be used; for patients who are intolerant to an ACE inhibitor due to cough, an ARB should be given in the absence of contraindications or hemodynamic instability
- lisinopril
  - 2.5 milligram orally once a day
  - 5 milligram orally once a day
  - 10 milligram orally once a day
  - 20 milligram orally once a day
- ramipril
  - 1.25 milligram orally 2 times a day
  - 2.5 milligram orally 2 times a day
  - 5 milligram orally 2 times a day

Angiotensin Receptor Blockers
- For patients without contraindications or hemodynamic instability, an ARB should be given to patients who are intolerant to ACE inhibitors (except when intolerance is due to renal insufficiency or hyperkalemia)
- losartan
  - 25 milligram orally once a day
  - 50 milligram orally once a day
  - 100 milligram orally once a day

Beta-Blockers
- For patients without contraindications or hemodynamic instability, beta-blocker therapy should be used

Physician/Date/Time: ____________________________ Nurse/Date/Time: ____________________________ Secretary/Date/Time: ____________________________

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metoprolol tartrate
- 12.5 milligram orally every 12 hours
- 25 milligram orally every 12 hours
carvedilol
- 3.125 milligram orally 2 times a day
- 6.25 milligram orally 2 times a day

Cardiac Glycosides
- Maintenance digoxin therapy should be reduced by 50% in patients with renal disease, amiodarone therapy, heart failure, or advanced age.
- Monitoring of therapeutic digoxin level is essential.
digoxin
- 0.125 milligram orally every other day
- 0.125 milligram orally once a day
- 0.25 milligram orally once a day

Diuretics: Loop
- Monitor creatinine, serum electrolytes, and urea nitrogen concentrations carefully, especially during active titration of diuretics or while on IV diuretics
furosemide
- 20 milligram intravenously once a day
- 20 milligram intravenously 2 times a day
- 40 milligram intravenously once a day
- 40 milligram intravenously 2 times a day

Platelet Inhibitors: Salicylates
- For patients with heart failure of ischemic origin, consider the use of aspirin; for patients with heart failure who have had an MI, consider the use of clopidogrel or warfarin as an alternative to aspirin
- For patients with heart failure of nonischemic origin, avoid the routine use of aspirin
aspirin
- 81 milligram orally once a day

Platelet Inhibitors: Thienopyridines
- For patients with heart failure who have had an MI, consider the use of clopidogrel as an alternative to aspirin
clopidogrel
- 75 milligram orally once a day

Potassium Supplements
potassium chloride
- 10 milliequivalent intravenously once
- 20 milliequivalent intravenously once
- 20 milliequivalent orally once a day
- 20 milliequivalent orally 2 times a day
**Vasodilators**

nitroglycerin 2% topical ointment

- 0.5 inch applied topically every 6 hours
- 1 inch applied topically every 6 hours

**Reminders**

- Avoid the routine use of antiarrhythmic agents for the primary prevention of sudden death or primary treatment of asymptomatic ventricular arrhythmias
- Avoid the routine use of nesiritide, except for those patients with acutely decompensated heart failure in whom symptomatic hypotension is not present and an IV vasodilator may be required in addition to diuretic therapy
- Avoid the routine use of NSAIDs
- Consider treatment with an HMG-CoA reductase inhibitor
- Do not use nondihydropyridine calcium channel blockers
- For patients who have atrial fibrillation, amiodarone should be used if beta-blocker therapy is not tolerated or contraindicated
- For patients with acute decompensated heart failure, avoid the routine use of morphine, especially in patients with impaired respiratory drive and abnormal mental status
- For patients with hypertension, use an antihypertensive agent (eg, aldosterone antagonist, ACE inhibitor, ARB, beta-blocker, diuretic) or a combination of antihypertensive agents to achieve a target BP of less than 130/80 mm Hg; do not use nondihydropyridine calcium channel blockers (eg, diltiazem, verapamil), cloNIDine, and moxonidine

**Respiratory**

- For patients who have acute heart failure and hypoxemia, oxygen therapy should be used; avoid the routine use of supplemental oxygen therapy in the absence of hypoxia
- O₂ TO MAINTAIN O₂ SAT @ 90%

**Laboratory**

**Cardiac Markers**

- Troponin-I
  - every 3 hours times 2, now and in 3 hours

**Chemistry**

- Magnesium (Mg) level, serum
- B-type natriuretic peptide (BNP)
- Thyroid stimulating hormone (TSH)

**Panels**

- Lipid panel
- Basic metabolic panel in 8 hours

**Therapeutic Drug Levels/Toxicology**

- Digoxin level

**Radiology**

**Computed Tomography**

- CTA, CHEST NON CORONARY

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**Physician/Date/Time:**  
**Nurse/Date/Time:**  
**Secretary/Date/Time:**

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Fax to Pharmacy
**General Radiography**
- PORTABLE, CHEST SINGLE VIEW
- XR, CHEST 2 VIEWS

**Diagnostic Tests**

**Cardiology**
- Avoid performing an endomyocardial biopsy as part of routine evaluation; however, consider obtaining an endomyocardial biopsy for selected patients in whom a suspected diagnosis would influence therapy
- Echocardiography to assess LV function should be performed
- 12-lead ECG - if not done in ED
- 2D ECHO W/DOPP AND COLOR FLOW
- NON STRESS TEST
- STRESS ECHO PHARM

**Consults**
- For patients who are at high risk for clinical deterioration or hospital admission, a multidisciplinary disease management program should be used
- Consult to cardiology
- Consult to dietitian
- Consult to heart failure clinic

**Nursing Orders**

**Assessments**
- Weight should be measured upon initial presentation and as part of ongoing assessments
- Cardiac monitor
- Strict Intake and Output
- Measure weight
  - DAILY BEFORE BREAKFAST

**Contingency**
- Notify provider ______________________

**Reminders**
- Avoid the routine use of antiarrhythmic agents for the primary prevention of sudden death or primary treatment of asymptomatic ventricular arrhythmias
- Consider ICD therapy for selected patients with heart failure; for patients with cardiomyopathy and significant arrhythmia or known risk of arrhythmia, consider ICD therapy before the LVEF falls to less than 35%
- For patients who have heart failure due to LV systolic dysfunction and a QRS interval greater than or equal to 120 milliseconds, consider the use of cardiac resynchronization therapy, with or without ICD therapy; for patients with heart failure due to LV systolic dysfunction and a QRS interval less than 120 milliseconds, the evidence for the use of cardiac resynchronization is inconclusive

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