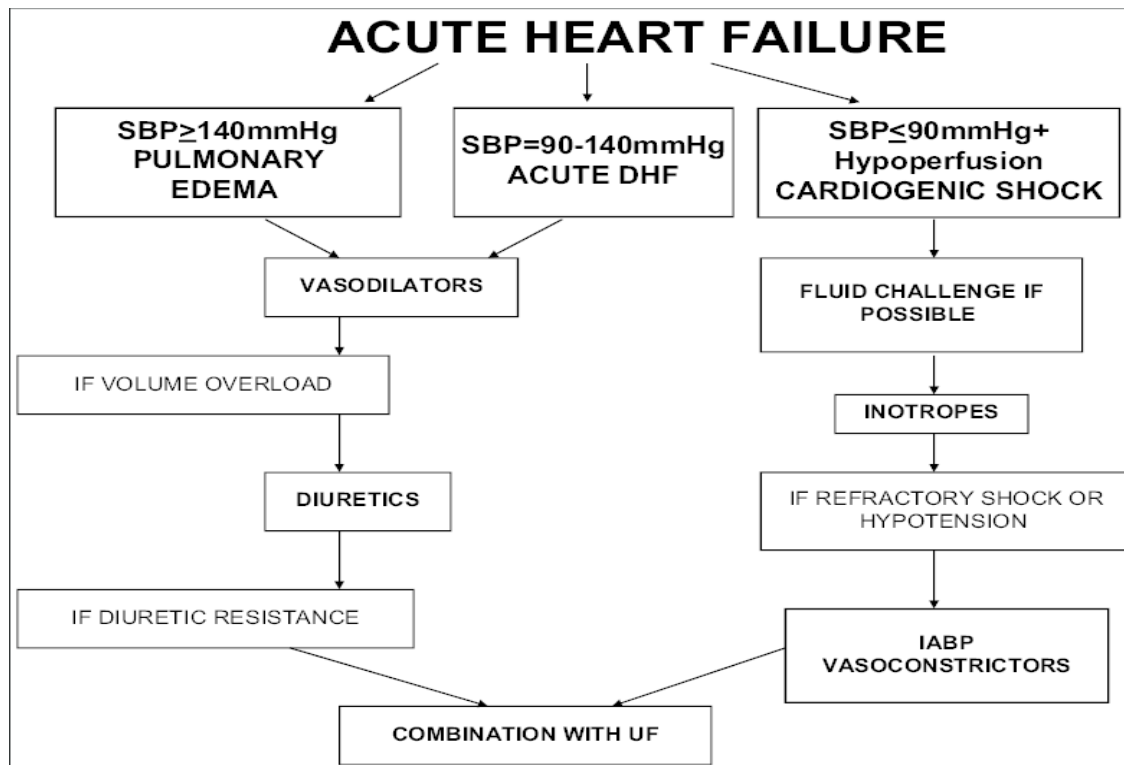
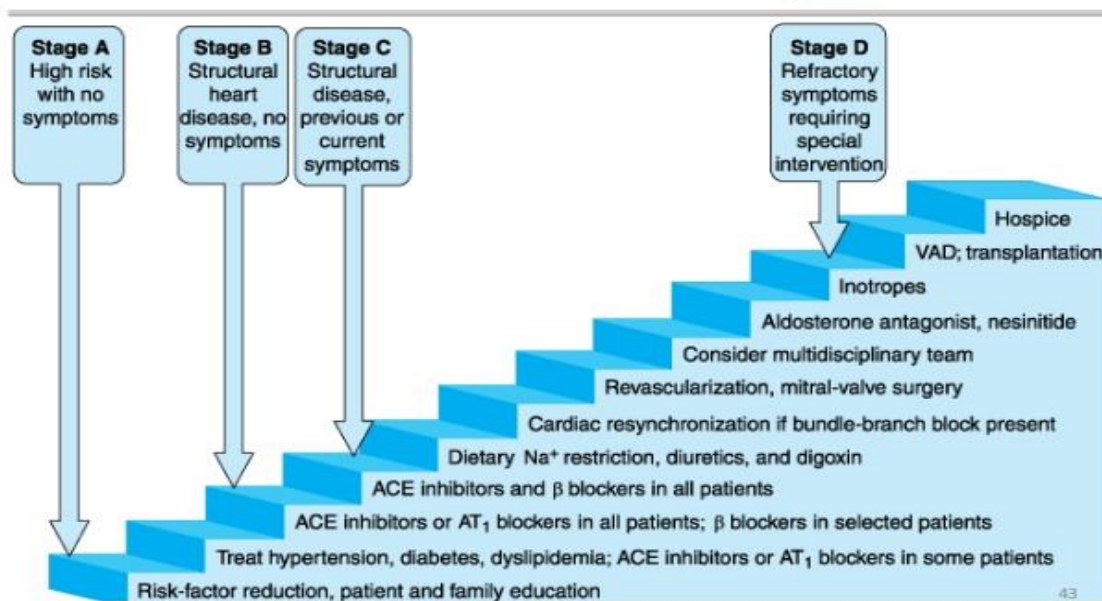


Dyspnea Cases: CHF Overview for Week 4 SIMS



Heart Failure Treatment Algorithm



The 2016 ACC/AHA/HFSA Focused Update on New Pharmacological Therapy for Heart Failure: An Update of the 2013 ACCF/AHA Guideline for the Management of Heart Failure

CHF Admission Orders:

Admitting Physician: _____

☐ Consults: _____

☒ Obtain Health Care Proxy if not available

☐ Old Records to floor

☒ Vital Signs q 4 Hr X 24 hours, then every 8 Hr

☒ **Notify MD if: BP less than 90 or greater than 170, HR less than 50 or greater than 120, RR greater than 24, SPO2 less than 88%, Temp less than 95°F or greater than 101°F**

1. ACTIVITY:

☐ Progressive activity as tolerated

2. DIET:

☐ Regular

☐ 2 gram NA+

☐ Low Fat, Low Cholesterol

☐ _____ Calorie Consistent Carbohydrate (ADA)

☐ Other

☐ Fluid restriction _____ mL/24 hours (if appropriate for hyponatremia)

3. NURSING ASSESSMENTS/INTERVENTIONS:

☒ Weight on admission and every AM

☒ Saline trap

☒ Intake and output every 8 hours

☐ Call MD in 6 hours if post diuretic output is less than _____ mL

☐ Cardiac monitor ☐ May discontinue cardiac monitor for tests

4. PATIENT EDUCATION

☒ Cardiac Education

☒ Smoking Cessation

5. RESPIRATORY:

☐ Oxygen per nasal cannula to maintain SaO₂ greater than 92%

☐ Monitor SaO₂ with O₂ on; if less than 92% maintain current liter flow and notify Physician; if greater than 92% discontinue O₂

☐ Repeat SaO₂ after 30 minutes

6. MEDICATIONS:

☐ Diuretics: _____

☒ ACE Inhibitor/ARB:

☐ Contraindicated and why: _____

☐ Beta Blocker: _____

☐ Contraindicated and why: _____

☐ Spironolactone(Aldactone): _____

MEDICATIONS Continued: (These items must be addressed; if not indicate reason).

☐ Nitrate: _____

☐ Inotrope: _____

☐ Digoxin (Lanoxin): _____

☐ Enteric Coated Aspirin _____ mg PO daily **Start today**

8. LAB STUDIES: If not done in the ED

☒ CBC, CMP, Magnesium, Prothrombin time/PTT

☒ ABG (if admission SaO₂ is 91% or less on room air)

☒ Urinalysis

☒ BMP in AM

☐ BNP (B-type Natriuretic Peptide)

☐ Cardiac Markers: CKMB, Troponin I, Myoglobin; draw baseline, repeat in 90 minutes Repeat Cardiac CKMB, Troponin I in 6 hours

☐ Digoxin level

☐ TSH

☐ Other labs: _____

9. DIAGNOSTICS

☒ EKG on admission - Reason: CHF

☒ Chest x-ray – Reason CHF ☐ PA & lateral ☐ Portable

☒ LV function evaluation for CHF

☐ 2 D ECHO

Pharmacy of CHF

Drug	Preparations	Commonly Used Dosages	Comments/Adverse Effects
Amiodarone	200, 400 mg tablets	8-12 mg/kg q24h PO for 7-10 days, then reduce to 4-6 mg/kg q24h PO	Long elimination half-life Hepatotoxicity is common Thyroid dysfunction, bone marrow suppression
Amlodipine	2.5, 5, 10 mg tablets	0.1-0.4 mg/kg q24h or divided BID PO	Slowly up-titrate dose in CHF Higher doses often needed in systemic hypertension caused by chronic kidney disease Hypotension
Atenolol	25, 50, 100 mg tablets	0.2-1 mg/kg q12h PO	Gradual up-titration required in CHF Dogs without CHF can tolerate higher doses Bradycardia, AV block, hypotension Depression of contractility, CHF
Benazepril	5, 10, 20, 40 mg tablets	0.25-0.5 mg/kg q12h PO	Start at lower range and increase to maximal dose with monitoring of renal function and BP Acute renal failure, azotemia, hyperkalemia
Carvedilol	3.125, 6.25, 12.5, 25 mg tablets	0.1-0.5 mg/kg q12h PO in DCM Up to 1.0 mg/kg q12h, PO in dog with normal LVSF	Gradual up-titration required in CHF Precipitation of HF possible, especially in DCM Dogs without CHF tolerate higher doses
Butorphanol	2 mg/ml or 10 mg/ml injectable 5, 10 mg tablets	0.1-0.5 mg/kg IM or IV Typical CHF dose is 0.2-0.25 mg/kg IM or IV 0.5-1.0 mg/kg orally as needed up to TID	Dose-dependent sedation Higher doses tolerated in dogs without CHF Respiratory depression
Digoxin	0.125, 0.25 mg tablets (preferred); 0.05 mg/ml and 0.15 mg/ml elixirs	0.0055 to 0.011 mg/kg q12h, PO	Begin at lower end of dosage range to limit toxicity Target trough serum levels of 0.8-1.2 ng/ml Renal failure delays elimination Anorexia, depression, vomiting, diarrhea Junctional tachycardia, AV block, PVCs/VT