Dyspnea Secondary to Suspected Acute Heart Failure Syndrome (AHFS)

1. Fluid bolus 500 cc normal saline
2. Consider one:
   a. Dopamine
   b. Dobutamine
   c. Milrinone
3. If pulmonary congestion and improved hemodynamics consider nitrates

Imminent Respiratory Failure?

Yes

Cardiogenic Shock?

No

Yes

Confirm AHFS

History and Physical
Consider high yield items:
1. Emergency Physician clinical impression (~85% Specific)
2. History of CHF LR (+) 5.8
3. PND LR (+) 2.8,
   Orthopnea LR (+) 2.2
4. S3 LR (+) 11, JVD LR (+) 5.1,
   Murmur LR (+) 2.8

Diagnostics
Consider:
1. ECG
2. CXR
3. BNP
   a. <100 LR ( - ) 0.1
   b. >500 LR (+) 6
   c. >1000 LR (+) 16.5
4. Cardiac markers
5. CBC, Complete metabolic panel, transthoracic ultrasound

Consider Non-invasive Ventilation

Clasify Patient into Appropriate Category

Normotensive AHFS
Systolic BP (mmHg) < 140
Duration of symptoms – Days to Weeks
Volume Status - Hypervolemic
1. Nitrates
   a. NTG 0.4 mg SL Q 5mins x 3
   b. Nitro paste (20mins)
2. IV Diuretic

Hypertensive AHFS
Systolic BP (mmHg) > 140
Duration of Symptoms 24-48 hours
Volume status – Euvolemic/mild hypervolemia
1. Aggressive initial IV nitrates (> 100 µg/min)
2. Consider IV Diuretic
3. Consider SL Captopril
   a. Caution if poor renal function
   b. 25 mg if SBP >110mmHg
   c. 12.5 mg if SBP < 110 mmHg

Poor Prognostic Factors
BUN > 43
Cr > 2.3
SBP < 115

1. One SL nitroglycerine is approximately 80 mcg/min. Consider decreasing nitroglycerine drops once clinical condition improves
2. MMC CHF Team goal is < 2 hours from door to diuretic. Caution should be exercised if poor renal function. A reasonable starting dose of diuretic is to give the patient’s daily PO dosage IV.

This guideline was ratified by the emergency department faculty at Maine Medical Center in August 2010. It reflects our expert opinion and is not necessarily applicable to all institutions. It is intended to be a reference for clinicians caring for patients and is not intended to replace providers’ clinical judgment.

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