

SAN FRANCISCO EMERGENCY MEDICAL SERVICES AGENCY

Effective: 09/01/11
Supersedes: 01/01/11

Protocol: P-021.1

RESPIRATORY DISTRESS ACUTE PULMONARY EDEMA

SUBJECTIVE FINDINGS

- History: AMI, CHF and/or dialysis, hypertension, cardiomyopathy, valvular insufficiency.
- Signs/Symptoms: Chest pain, shortness of breath, dyspnea on exertion, orthopnea, cough, pink sputum, rales
- Use of erectile dysfunction drug (see PRECAUTIONS AND COMMENTS)

OBJECTIVE FINDINGS

- Mental Status, skin signs, perfusion.
- Respiratory rate, rhythm, pattern and work of breathing.
- Lung sounds.
- Blood pressure, heart rate and rhythm, oxygen saturation.
- Pedal edema, JVD.

BLS Treatment	ALS Treatment
<ul style="list-style-type: none">• Ensure patent airway• High flow oxygen 10-15 L/min via nonrebreather mask• Assist ventilations with bag valve mask if indicated• Position of comfort• RMC	<ul style="list-style-type: none">• IV access [see PRECAUTIONS AND COMMENTS]• NTG 0.4 mg sublingual spray or tablet. Repeat q 5 min if SBP > 100 mmHg [see PRECAUTIONS AND COMMENTS]. IV not required prior to NTG administration, but should be started as soon as possible.• Obtain 12 lead EKG (if possible).• Consider use of CPAP (see Protocol CPAP # 004.7).• Morphine sulfate 2-4 mg slow IV push repeat as indicated if SBP > 100mmHg to total dose of 20 mg.• Consider Ondansetron 4 mg IV/IM for nausea/vomiting, may be repeated q 20" to a maximum dose of 12 mg.• If SBP< 90 mmHg (cardiogenic shock), administer Dopamine 5-20 mcg/kg/min IV infusion. Titrate to SBP >90 mmHg.• Advanced airway management as indicated.

DOCUMENTATION

- Administration of oxygen.
- Administration of **NTG**.
- Obtaining 12 lead EKG if possible.
- IV placement in moderate/severe distress.
- Use of CPAP when indicated.

PRECAUTIONS AND COMMENTS

- If the computer interpretation of the EKG indicates ST Segment Elevation Myocardial

SAN FRANCISCO EMERGENCY MEDICAL SERVICES AGENCY

Effective: 09/01/11

Protocol: P-021.1

Supersedes: 01/01/11

Infarction, take the patient to an appropriate STAR Receiving Facility per Policy 5000 Destination. **Follow Protocols P-10 Chest Pain / Acute Coronary Syndrome and P-10.1 ECG for hospital notifications about STEMI patient.**

- Do not administer **NTG** to patients who have taken any erectile dysfunction drug within the following time frames.
 - Sildenafil – > 24 hours
 - Tadalafil - > 72 hours
 - Vardenafil - > 72 hours
- NTG dosage may be doubled as long as patient's systolic blood pressure remains > 160 mmHg.
- If patient is treated with CPAP, **notify the receiving hospital that "This is a CPAP patient"** in order to assure time for respiratory therapy to be available and avoid delays in transfer of care.