

CONGESTIVE HEART FAILURE / PULMONARY EDEMA

ALL PROVIDERS

- ☐ Focused history and physical exam
 - Determine whether the patient (male or female) has taken erectile dysfunction medications such as Viagra, Levitra or Cialis within the last 24 hours.
 - Assess blood glucose level.
- ☐ Continuous cardiac monitoring, CO2, 12 lead ECG, and pulse oximetry monitoring, when available
- ☐ **Treatment Plan**
 - Maintain airway; assist with breathing as necessary, provide oxygen as needed to target SpO2 90-94%.
- ☐ **Key Considerations**
 - Do not use nitroglycerin if the patient has taken erectile dysfunction medications in the last 24 hours.
 - In pregnant patients of >20 weeks gestation: Place wedge-shaped cushion or multiple pillows under patient's right hip and manually displace the uterus.
 - Pediatric lowest acceptable systolic blood pressures are birth to 1 month = 60mmHg, 1 month to 1 year = 70mmHg, 1 year to 10 years is = 70mmHg + (age x 2) and over 10 years = 90mmHg.

ADULT

PEDIATRIC (<15 years of Age)

NOTE: Pediatric weight based dosing should not exceed Adult dosing.

EMT

EMT

- ☐ Assist patient with prescribed nitroglycerin SL every 5 minutes, up to 3 doses, as long as dyspnea or chest pain persist and SBP >90 mmHg
 - Do not administer nitroglycerin if the patient (male or female) has taken erectile dysfunction medications within the last 24 hours
- ☐ **CPAP/BiPAP** – Consider when the patient is awake, cooperative and SBP>90 mmHg
 - Explain the procedure to the patient
 - **CPAP** - Provide 10 L/min oxygen and PAP at 10 cm H2O
 - **BIPAP** – Provide 10 L/min oxygen and IPAP at 10 cm H2O with EPAP at 5 cm H2O
- ☒ **Contact OLMC to discuss further settings and treatment above the initial setup.**

- ☐ **CPAP/BiPAP** – ONLY use when the patient is on the machine at home. Maintain home settings and bring machine with the patient. If unable to adequately ventilate, return to BVM

AEMT

AEMT

- ☐ Supraglottic device, vascular access and fluid
 - IV access prior to nitrates is preferred if possible
 - Limit fluid bolus to 250–500 mL NS
- ☐ **Nitroglycerin 0.4 mg SL** every 5 minutes (max of 3 doses) if dyspnea or chest pain persist and SBP >90 mmHg.

- ☐ Supraglottic device, vascular access and fluid

PARAMEDIC

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- ❑ **Push Dose Epinephrine 10mcg** as needed to maintain a SBP>100 mmHg after fluid bolus
- ❑ **Epinephrine 2 mcg/min IV/IO** infusion for shock. Titrate up to 10 mcg/min to maintain a SBP >100 mmHg
- ❑ **Norepinephrine 1 mcg/min IV/IO** for shock. Titrate up to 30 mcg/min to maintain SBP >100 mmHg.

- ⌚ **Push Dose Epinephrine 1mcg/kg** as needed to maintain a SBP>70 + (age in years x 2) mmHg after fluid bolus
- ⌚ **Epinephrine 0.1–1mcg/kg/min IV/IO** infusion for shock. Titrate to maintain a SBP >70 + (age in years x 2) mmHg.