

## Smoke Inhalation Injury Heparin Protocol

### Indications:

- Presence of carbonaceous sputum with suctioning
- Intraoral or pharyngeal burns
- Upper airway edema, erythema, mucosal blisters
- Inhalation injury confirmed by bronchoscopy
- Evidence of smoke inhalation
- PaO<sub>2</sub>/FiO<sub>2</sub> less than 200
- History of fire in an enclosed space
- Carboxyhemoglobin value greater than 10

Initiate protocol immediately if any of the above indications are noted.

### Intubated Patient

- Lung protective strategy modality including: ARDSnet, APRV, or PRVC
- Aerosolize: 2.5mg Albuterol/3mL 20% Mucomyst alternating with 5000units of Heparin/3mL NS every 4 hours
  - Start with 2.5mg Albuterol/3mL 20% Mucomyst then in 4 hours aerosolize 5000units of Heparin/3mL NS then 4 hours later 2.5mg Albuterol/3mL 20% Mucomyst etc...
  - Example: 0700 - 2.5mg Albuterol/3mL 20% Mucomyst*  
*1100 - 5000units of Heparin/3mL NS*  
*1500 - 2.5mg Albuterol/3mL 20% Mucomyst*  
*1900 - 5000units of Heparin/3mL NS*
- Deliver aerosolized therapy for 7 days
- CPT/Wrap Q4h for 10 minutes
  - Hz 10-14 (as tolerated)
  - Pressure 1-4 (as tolerated)
  - After completion 5 minutes of therapy, pause therapy and suction patient, repeat in 5 minutes
- Sputum cultures every Monday, Wednesday and Friday

### Non-Intubated Patient

- Humidified O<sub>2</sub> keeping sats greater than 90%
- IS Q2 hours
- Aerosolize: 2.5mg Albuterol/3mL 20% Mucomyst alternating with 5000units of Heparin/3mL NS every 4 hours
  - Start with 2.5mg Albuterol/3mL 20% Mucomyst then in 4 hours aerosolize 5000units of Heparin/3mL NS then 4 hours later 2.5mg Albuterol/3mL 20% Mucomyst etc...
  - Example: 0700 - 2.5mg Albuterol/3mL 20% Mucomyst*  
*1100 - 5000units of Heparin/3mL NS*  
*1500 - 2.5mg Albuterol/3mL 20% Mucomyst*  
*1900 - 5000units of Heparin/3mL NS*
- Deliver aerosolized therapy for 7 days
- CPT/Wrap Q4h for 10 minutes
  - Hz 10-14 (as tolerated)
  - Pressure 1-4 (as tolerated)
  - After completion 5 minutes of therapy, pause therapy have the patient cough or NT suction patient, repeat in 5 minutes
  - Sputum cultures every Monday, Wednesday and Friday