Date: 07/01/2024 Policy #7180

I. Purpose:

A. To establish indications, guidelines, and the standard procedure for monitoring chest tubes (thoracostomy tubes) in the prehospital setting by paramedics.

II. Authority:

A. Health and Safety Code, Section 1797.220, 1798. Title 22, Section 100170.

III. Policy:

- A. Monitor vital signs, work of breathing, and cardiac rhythm.
- B. Pulse oximetry continuous monitoring. If oxygen saturation less than 95% on room air, provide oxygen by mask or nasal cannula (6 lpm flow rate).

IV. Procedure:

- A. Assure all chest tube connections are taped and secured to prevent disconnection.
 - 1. If suction was on and patient's clinical status appeared stable, the same suction settings should be used by the receiving unit.
 - 2. Tubing between the collection chamber and the patient should be reconnected if disconnected.
- B. Do not clamp or kink chest tube or drainage tubing.
- C. Hang collection chamber on the side of the gurney (do not tip over).
- D. Keep collection chamber below the level of the chest.
- E. Avoid dependent loops of fluid filling drainage tubing.
- F. It is no longer recommended to "milk" or squeeze the entirety of the chest tube to move drainage down the tube, as this could increase intrathoracic pressure.
- G. If chest tube is pulled out, place petroleum gauze dressing over insertion site.
- H. If air leaks, check connections.
- I. If chest tube partially pulled out:
 - 1. Do not push tube back into chest.
 - 2. Secure tube as is at the site.
- J. If patients become dyspneic:
 - 1. Assess breath sounds.
 - 2. Complete needle thoracostomy procedure as indicated for suspected tension pneumothorax
- K. If there is a sudden increase in bloody drainage:

- 1. Immediate base physician contact should occur for further management recommendations.
- 2. Patient clinical status should be reassessed, and preparation for possible rendezvous with air ambulance as determined by Base Hospital Physician.
- L. Notify receiving center if any complications occur during transport.
- M. Document the following in the patient care record:
 - 1. Any complications
 - 2. Any changes in clinical status
 - 3. Total output of liquid drainage at time of receiving patient and hand-off to receiving facility.

APPROVED:

SIGNATURE ON FILE – DATE

Katherine Staats, M.D., FACEP

EMS Medical Director