Sierra – Sacramento Valley EMS Agency Treatment Protocol

Tension Pneumothorax

Effective: 12/01/2021

Approval: Victoria Pinette – Executive Director

Approval: Troy M. Falck, MD – Medical Director

Next Review: 09/2024



- Assess respiratory status, manage airway and assist ventilations as appropriate
- High flow O₂



Suspected tension pneumothorax with absent or diminished breath sounds and at least one of the following:

- Combined hypotension (SBP <90) and SpO2 <94%
- Penetrating injury to the thorax

<u>OR</u>

Traumatic cardiac arrest with suspected tension pneumothorax



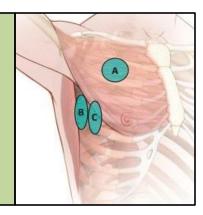
Perform Needle Thoracostomy on the affected side(s) as follows:

- Use a minimum 14g x 3.25" catheter specifically designed for needle decompression
- Attach an empty 10 mL syringe to the catheter prior to insertion to allow for better grip when puncturing the chest wall
- Insert needle with syringe attached at a 90° angle, just over the superior border of the rib, and advance until air is freely aspirated
- If using a 3.25" length catheter, advance catheter over the needle until catheter hub rests against the skin
- Remove syringe and needle from catheter, attach a stopcock or one-way valve and adequately secure
- Recheck breath sounds
- Two (2) attempts allowed on affected side(s) without base/modified base hospital contact
- Continuously monitor & reassess

Approved Needle Thoracostomy Sites

- A Mid-clavicular line in the 2nd intercostal space
- B Mid-axillary line in the 4th or 5th intercostal space*
- C Anterior axillary line in the 5th intercostal space*
- *Above the anatomic nipple line

Note: If an initial attempt at one approved site is unsuccessful, consider utilizing an alternate approved site



Monitor

reassess

NO-

T-2

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