

Yolo County Emergency Medical Services Agency

Protocols

Revised Date: September 1, 2018

TENSION PNEUMOTHORAX

Adult Pediatric

BLS

Assess vital signs
O₂, titrate SpO₂ > 94%
Lung Sounds
Assist ventilations as needed

ALS

Cardiac Monitor, Waveform EtCO₂, Vascular Access

Indication

- Blunt trauma patients who are hemodynamically unstable (tachycardia, tachypnea, hypotension, AMS, cyanosis, jugular vein distention, tracheal deviation, respiratory failure) with suspected tension pneumothorax and absent breath sounds
- Traumatic cardiac arrest patients with signs of blunt chest trauma

Procedure

- Chose site:
 - Preferred: Lateral 4th or 5th intercostal space, mid-axillary line (must be above the anatomic nipple line)
 - Second: Anterior 2nd intercostal space, mid-clavicular line
- Use minimum 14 g x 3 inch (8 cm) catheter
- Insert the needle at a 90 degree angle just over the superior border of the rib
- Advance until a gush of air or blood returns freely (if not, you are not in the pleural space)
- Advance only the catheter to the chest wall, remove the needle from the catheter
- Leave the catheter in place, do not attach anything to the catheter
- Allow to vent freely
- Monitor and continue to reassess breath sounds

Direction

- Two attempts only per affected side
- Cover any open wounds with a chest seal or occlusive dressing
- Contact Receiving ED Physician for additional treatment

Effective Date: September 15, 2018