

NEEDLE DECOMPRESSION

INDICATIONS

This procedure is to be used for patients with:

- Evidence of thoracic trauma AND any of the following:
 1. Traumatic arrest
 2. Evidence of tension pneumothorax, which are:
 - a. Systolic blood pressure <90 mmHg AND
 - b. Respiratory distress or respiratory failure
 3. Direction by Online Medical Control
- Suspected tension pneumothorax in non-traumatic cardiac arrest (e.g. PEA arrest with subcutaneous emphysema)

CONTRAINDICATIONS

- Isolated, decreased breath sounds without evidence of hypotension and respiratory distress

EQUIPMENT

1. 14 gauge 3.5" angiocatheter
2. Alcohol prep pad

PROCEDURE

1. Identify second intercostal space in the midclavicular line on the same side of the chest as the traumatic injury or subcutaneous emphysema.
2. Prepare the skin with alcohol prep pad.
3. Insert the needle at a 90 degree angle into the skin just over the third rib into the second intercostal space in the midclavicular line.
3. Aspirate as necessary to relieve respiratory distress.
4. Leave catheter in place; remove syringe and needle from catheter for transport.
5. If no improvement in blood pressure or respiratory status, check for free flow of air through the catheter. If obstructed, place second catheter next to the first. Do not delay transport for repeated attempts at decompression.

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