

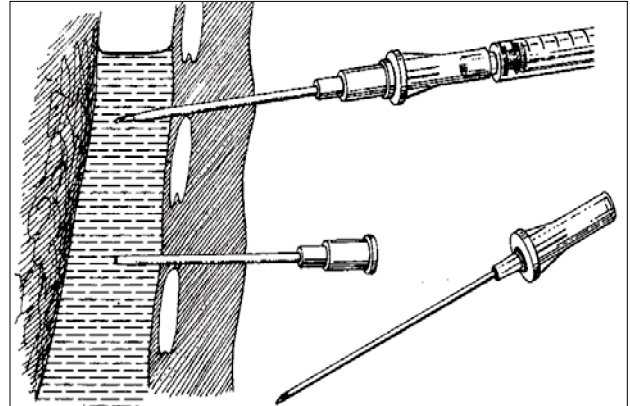


Chest Decompression with Needle

INDICATIONS:

Patients with hypotension (Systolic BP less than 90), clinical signs of shock, **and at least** one of the following signs:

- Jugular vein distention.
- Tracheal deviation away from the side of the injury (often a late sign).
- Absent or decreased breath sounds on the affected side.
- Hyper-resonance to percussion on the affected side.
- Increased resistance when ventilating a patient.
- Patients in traumatic arrest with chest or abdominal trauma for whom resuscitation is indicated require bilateral chest decompression.



PROCEDURE:

- Administer high flow oxygen
- Locate the second intercostal space in the mid-clavicular line on the same side as the pneumothorax. Cleanse the site. [Note: If unable to place anteriorly, lateral placement may be used at the fourth intercostal space, midaxillary line.] Insert the 12-14 gauge x 2 ½ inch catheter with 10 cc syringe attached into the skin over the third rib and direct it just over the top of the rib (superior border) into the interspace
- Advance the catheter through the parietal pleura until a “pop” is felt and air or blood exits under pressure through the catheter, then advance catheter only to chest wall.
- Remove the needle, leaving the plastic catheter in place
- Secure the catheter hub to the chest wall with dressings and tape
- Consider placing a finger cut from an exam glove over the catheter hub. Cut a small hole in the end of the finger to make a flutter valve. Secure the glove finger with tape or a rubber band. (Note – don’t waste much time preparing the flutter valve; if necessary control the air flow through the catheter hub with your gloved thumb) or use a commercial flutter valve.
- Evaluate the response in the patient. Assess breath sounds, oxygen saturation, and general appearance of the patient
- Monitor capnography, pulse oximetry, and cardiac status, observe closely for signs of complication
- Document time and response on the patient care report (PCR)