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**chest decompression**

**Clinical Indications**

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| * Patients with hypotension (SBP < 90 mmHg), clinical signs of shock, and at least one of the following signs:   Jugular venous 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. These patients may require bilateral chest decompression even in the absence of the signs noted above. |

**TREATMENT GUIDELINES**

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| **R-EMR** | **E–EMT** | **A-AEMT** | **P-PARAMEDIC** | **\*\*M-Medical Control \*\*** |

**\*\*\*Higher level providers are responsible for lower level treatments\*\*\***

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| * Don personal protective equipment (gloves, eye protection, etc.). * Administer high flow Oxygen. * Identify and prep the site: Locate the second intercostal space in the mid-clavicular line on the same side as the pneumothorax. If unable to place anteriorly, lateral placement may be used at the fourth ICS in the mid-axillary line.   Prepare the site with povidone-iodine ointment or solution.   * Insert the catheter (14 gauge for adults) 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 the 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. * Attach a Heimlich valve to the catheter to provide an out let for air without allowing new air to be introduced, and secure. * Document procedure, result and needle placement location in PCR.   AnimNeedleThoracneedlethoracentesis[https://encrypted-tbn0.gstatic.com/images?q=tbn:ANd9GcRRPgNX6x9cG3yZ6BPkf2ocRVS8rPFQya1NmjKMNSf3n48Lvvvc](http://www.google.com/imgres?sa=X&hl=en&qscrl=1&rlz=1T4ADRA_enUS386US388&biw=1024&bih=538&tbm=isch&tbnid=nJ4Usn9vUImmyM:&imgrefurl=http://ems-supplies.penncare.net/p-1095-cook-needle-decompression-kit.aspx&docid=jcsc_FmKET3YgM&imgurl=http://ems-supplies.penncare.net/images/Product/medium/1095.jpg&w=250&h=250&ei=o8EgU8y0NoPkoASqpYDYBA&zoom=1&iact=rc&dur=1255&page=2&start=9&ndsp=16&ved=0CJkBEIQcMBQ) | P |

**QA Parameters: 100% of patients receiving needle Chest Decompression.**