

County of Santa Clara Public Health Department



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July 21, 2010

To: All Prehospital Providers

From: Eric Rudnick, MD
EMS Medical Director

A handwritten signature in black ink, appearing to read "Eric Rudnick, MD".

Subject: Best Practice – Pleural Decompression

The following information is related to EMS Agency review of prehospital care. The lessons learned from these reviews are applicable to all paramedic providers. Please review this important information and incorporate it into your practice.

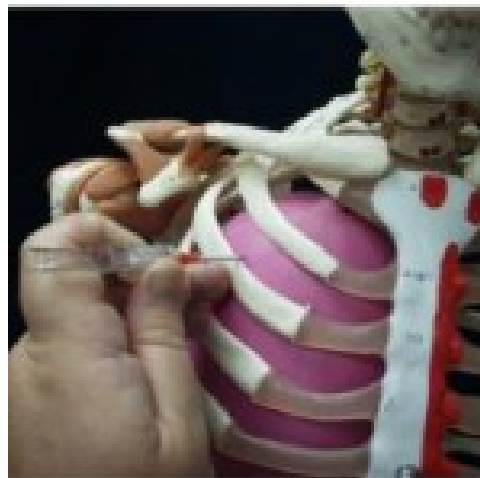
Pleural Decompression:

The seldom used skill of Pleural Decompression is a potentially life saving procedure when applied appropriately.

The preferred site is the 2nd or 3rd intercostal space in the mid-clavicular line. This site is more easily accessed and therefore safer to use. The ability to count ribs and not inadvertently misplace the catheter is more readily achieved in the mid-clavicular site. Identify the clavicle the first rib you feel immediately below the clavicle is the second rib. The space just below it is the 2nd intercostal space.

The secondary site is the 4th or 5th intercostal space in the mid-axillary line. The lateral spaces are not as readily apparent with regards to the starting point in the axillae. The 4th or 5th intercostal space is relatively high into the axillae. It is easy to inadvertently place the catheter lower than intended. This can result in injury to solid organs such as the liver or spleen.

As always remember to place the catheter over the rib while inserting, thus avoiding the neurovascular structures that lie underneath the ribs.



The photographs above illustrate the anatomic location of the 2nd rib just below the clavicle. Remember to insert the catheter above the rib edge to avoid the neurovascular bundle.

*Board of Supervisors: Donald F. Gage, George Shirakawa, Dave Cortese, Ken Yeager, Liz Kniss
County Executive: Jeffrey V. Smith*