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Prevention and Treatment of Hypothermia

Purpose: To define methodologies to prevent and treat hypothermia in the trauma patient

Definitions:

- A. Classification of hypothermia in the presence of injury
 - a. Mild hypothermia: 96.8° F
 - b. Moderate hypothermia: < 96.8° F to 89.6° F
 - c. Severe hypothermia: ≤ 89.6° F

Guidelines:

- A. All trauma patients should have an initial temperature measured within 30 minutes of arrival to treatment room
- B. Care should be taken to minimize exposure during diagnostic and therapeutic procedures
- C. The trauma room temperature should always be maintained at > 82° F
- D. The operating room temperature should be warmed to a temperature of 85° F for any emergent and/or lengthy (i.e. over 1 hour) trauma case
- E. All trauma patients should be managed using principles of passive warming
 - a. Examples include removal of wet clothing/linen, coverage with warm blankets, and maintenance of adequate ambient room temperature (82° F)
 - b. Additional protection for infants and children can include booties and a cap
- F. All fluids and blood products should be warmed, either with a standard fluid warmer or via the rapid infuser
- G. Physician Notification of Hypothermia:
 - a. Notify the trauma surgeon immediately if the patient's temperature is < 95.5° F
 - b. If the temperature is < 96.8°F, attempt rewarming measures.
 - i. Recheck the temperature in one hour. If the temperature remains < 96.8°F, call the trauma surgeon.

- H. Treatment of hypothermia
 - a. Mild hypothermia
 - i. Treat with non-invasive, passive external warming
 - b. Moderate hypothermia
 - i. Treat with passive external rewarming such as warm room, warm blankets, ambient overhead heaters, warmed forced-air blankets, and warmed IV fluids
 - c. Severe hypothermia
 - i. Treat with active core warming such as humidified and warmed air through mechanical ventilation, warm fluid lavage (i.e. bladder catheter, thoracostomy tube, peritoneal dialysis catheter)
 - 1. May require extracorporeal warming
 - d. Consider use of the Normothermia Protocol
 - i. Use Normothermia for Hypothermia Patients Order Set

References:

- Advanced Trauma Life Support, American College of Surgeon, 10th Edition