

PACU PROCEDURE

CATEGORY: Program Specific
ISSUE DATE: May 11, 2012
SUBJECT: **BAIR HUGGER TEMPERATURE
MANAGEMENT SYSTEM**

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Approval: Clinical Policies and Procedures Committee Lisa Grace 	Date: March 5, 2025

PURPOSE

To ensure the proper use of the Bair Hugger™ temperature management system to provide comfort warming and pre warming to patients in both the pre and post-operative setting.

PROCEDURE

Equipment

- Bair Hugger™ unit with hose or Bair Paw™ unit with hose
- Bair Hugger™ blanket or Bair Paw™ gown
- Monitoring equipment for blood pressure, pulse and SpO₂
- Exergen temporal thermometer or other appropriate tool for measuring core temperature

Special Instructions

- The Bair Hugger™ system is a convective warming device which transfers heat to patients with the intent to prevent and treat hypothermia (core temperature less than 36°C). The system can also be used to provide adult and pediatric patient thermal comfort when conditions exist that may cause a patient to become too cold.
- **The system is not to be used in areas where patients with poor perfusion or decreased sensation are unmonitored during prolonged warming therapy sessions. Thermal injury may result.**
- Bair Hugger™ blankets and Bair Paw™ gown are single patient use only.
- Examine the warming unit prior to use to ensure no visible damage. If damage is noted, notify biomed for repair.
- Do not use forced air warming devices over transdermal medications, doing so may lead to increased drug delivery, patient injury or death.
- Do not warm patients with the warming hose alone or allow the hose to contact the patient's skin during warming; doing so may result in thermal injury.
- Always position the temperature controller cord and hose away from the patient's neck and shoulders to prevent entanglement.

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- Prevention of unintended perianesthesia hypothermia and promotion of normothermia are key priorities in the prevention of surgical site infections (SSI), decreasing hospital length of stay and lowering mortality rates. Monitoring core temperature and maintaining normothermia in the anesthesia phase is standard practice and is recommended standard practice throughout all other perianesthesia phases.

Method

1. Identify the patient and explain the procedure to the patient/parent/caregiver.
2. Ensure the patient is dry.
3. Ensure that the temperature management unit is safely placed on a hard surface or securely mounted to a bedrail or IV pole prior to initiating therapy. If mounting the unit to an IV pole, clamp the unit no higher than 110 cm from the floor and on an IV pole with a minimum 70 cm diameter wheelbase. Failure to do so may result in the IV pole tipping and injury to the patient.
4. Place the blanket or gown on the patient with the perforated side against the patient's skin.
5. Insert the unit hose in the hose port on the blanket or gown using a twisting motion to ensure a snug fit.
6. Turn the unit ON and select the appropriate temperature setting. If the over-temp indicator light illuminates and the alarm sounds, discontinue therapy and contact Biomedical Engineering for service. Air temperatures reaching the patient are approximately 2°C lower than the listed temperatures.
7. Lightly place a cotton blanket over the Bair Hugger™ blanket or gown for maximum effectiveness.
8. Nurse will provide instruction to patient's on how to adjust the temperature control on the Bair Paw™ gown independently once fully conscious.
9. Documentation must include:
 - A. Temperature - preoperatively, upon admission to the PACU, and Q15 minutes while the Bair Hugger™ is in use and at discharge from the PACU.
 - B. Add "Colour, Sensation, Movement, Temperature" (CSMT) intervention in the Electronic Medical Record (EMR) and document accordingly.
 - C. "Perioperative – Forced air warming device" intervention must be documented on in EMR.

EDUCATION AND TRAINING

Definitions

1. Unintended Perianesthesia Hypothermia: A core temperature of less than 36°C resulting from the effects of actions and preparations required for surgery and/or anesthesia.

Education/Training Related Information

Nurses must complete the "Thermoregulation for PACU" self-learning package prior to using the Bair Hugger™ temperature management system.

References and Related Documents

Bair Hugger™ Model 750 Warming Unit Operator's manual. (2023)

Hooper VD, Andrews JO. Accuracy of noninvasive core temperature measurement in acutely ill adults: the state of the science. Biol Res Nurs. 2006;8 (1):24-34

Hooper VD, Chard R, Clifford T, et al. ASPAN's evidence-based clinical practice guideline for the promotion of perioperative normothermia: second edition. J PeriAnesth Nurs. 2010;25 (6):346-365

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John, M., Crook, D., Dasari, K., Eljelani, F., El-Haboby, A., & Harper, C. M. (2016). Comparison of resistive heating and forced-air warming to prevent inadvertent perioperative hypothermia. *British Journal of Anaesthesia*, 116(2), 249–254. <https://doi.org/10.1093/bja/aev412>

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