SURVEY

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Temperature management: a guide to the latest equipment

Hypothermia is well recognised as influencing newborn health and a major risk factor contributing to neonatal morbidity and mortality. Maintaining a thermoneutral environment is a fundamental aspect of neonatal care. A thermoneutral environment is one in which an infant at rest maintains a core temperature of 36.8- 37.2°C so that oxygen consumption and energy expenditure are minimal, in order to optimise conditions for growth and development. Maintaining a warm chain during various interventions can prevent hypothermia-associated morbidity and mortality risk. In this issue of *Infant* we look at recent innovations in medical equipment designed to help ensure the best thermoregulated environment for a premature or sick baby.

Every cot becomes a heated cot with the ASTOPAD Baby Warmer

Stihler Electronic's ASTOPAD Baby Warmer provides premature and newborn babies with a comfortable, safe and gentle protective heat. It helps essential sleep and aids optimal development at a crucial time of life. It can be used as a heated surface under the baby and/or as a cover over the baby and takes less than three minutes to reach the desired temperature. The Baby Warmer can be used in a wide range of situations:

- in the delivery room for providing initial heat on the resting surface
- in the neonatal unit or postnatal ward for

providing long-term heat for one or two babiesbefore, during and after surgery to prevent

- perioperative hypothermia
 for maintaining the baby's body heat during
- skin-to-skin (kangaroo) care
- when transporting infants within the hospital using an optional integrated battery.

Other features include a soft, flexible and disinfectable blanket and no consumables. The ASTOPAD Baby Warmer is available from Eden Medical.



The TempWatch: 24/7 monitoring for detecting neonatal hypothermia

In hospital settings, especially in the neonatal intensive care unit, a thermoneutral environment is maintained by keeping newborn babies in warmers and incubators. However, once in the stepdown nursery or postnatal ward, infants are at a higher risk of becoming hypothermic and a lack of continuous monitoring may lead to hypothermia going undetected. Hence there is need for an accurate, simple and easy to understand device that aids the mother in continuous monitoring of temperature during her

baby's hospital stay and also in the home setting following discharge.

The TempWatch bracelet is a silicone band with a thermistor metal cup that



provides 24/7 monitoring to detect neonatal hypothermia. The bracelet continuously monitors for one month following activation, displaying a blue light for a normal temperature. It blinks with an orange light and sounds an alarm if the infant's core temperature falls below 36.5°C, indicating hypothermia. It has sensitivity and specificity of 98.6% and 95%, respectively, making it a reliable tool to help assess the prevalence of hypothermia. TempWatch is available from Delta Medical International.

Baby warming systems using Kanmed and Thermocare

The Kanmed BabyBed can be used with the Kanmed BabyWarmer to create the Kanmed Baby Warming System, which enables babies to to be cared for out of the traditional incubator environment. It is available from Central Medical Supplies (CMS).

The warmer is designed to enable a gentle warmth transfer from the mattress to the baby. Kanmed BabyWarmers are available with a choice of interchangeable mattresses, which include water and gel. The integrated heat pad of the new gel mattress is heated to the selected temperature, which replicates the mother's warm skin. The BabyWarmer also comes complete with a soft baby nest, which can be adjusted to create a snug sleeping place with clear boundaries. A twin version of the BabyBed is available for co-bedding twins.

CMS also offers the Thermocare range of baby warming beds by Weyer GmbH. The Thermocare standalone baby warming system is



Taking temperature: accuracy matters to Exergen's temporal artery thermometer

The starting point for assessing an infant or child's health is taking their temperature and for this the accuracy of the thermometer is essential. Understanding the difference between a temporal artery thermometer (TAT) and a 'no-touch thermometer' (infrared gun) is important. A recent study compared the accuracy of the two and found that no-touch thermometers missed five out of every six fevers. The Exergen TAT has more than 87 published studies supporting its accuracy, from premature babies to infants and geriatrics. According to its manufacturers, the Exergen TAT-5000S delivers superior functionality in a demanding hospital environment. It stands up to the heavy duty demands of a highperformance hospital workplace, including the neonatal intensive care unit, emergency department and all inpatient settings. After two years of research and testing, Exergen has succeeded in its objective of eliminating case cracking caused by harsh chemical disinfectants commonly used in hospitals. The proprietary 'super plastic' cases are now used in all Exergen Temporal Scanner TAT-5000 series professional models. The TAT5000 is so robust that it comes with a lifetime warranty.

ideal for babies requiring surveillance in an intermediate care unit. The modular design of Thermocare beds enables users to configure the different units

available to their exact requirements. The base unit, Thermocare K, consists of the mobile bed with an

under-pad heating device that provides a thermally stable environment for babies. This model is an ideal replacement for existing under pad warming beds where there is no requirement for additional overhead radiant warmers. Thermocare C consists of the mobile bed with an overhead radiant warming system and Thermocare KCE includes both the under pad and overhead warming devices.

Weyer's Ceramotherm radiant warmer can warm the actual patient's temperature using its skin temperature sensors. It offers a flexible approach and can be operated in three different modes, such as pre-warming of patient pads, warming beds or manual mode ideal for baby changing, examination and intensive care situations.

Visit the Infant Supplier Guide for all the equipment and supplies your unit needs: www.infantjournal.co.uk/supplierguide.html

STIHLER ELECTRONIC

ASTOPAD[®] Baby Warmer The effective way of caring for essential sleep in newborns 2 babies simultaneously.

Stihler's ASTOPAD Baby Warmer provides premature High quality products for the medical field and newborn babies with a comfortable, safe and gentle protective heat. It helps and aids optimal development at a crucial time of life.

The ASTOPAD Baby blanket which can be

- Soft, flexible and wipeable

ALSO AVAILABLE:

Stihler ASTOFLO: Infant/paediatric fluid warmer (jacketed system, easy to apply, warm fluids up to patient)



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