

Hot topics from the web

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Neonatal-talk (www.infantgrapevine.co.uk) and **NICU-NET** (www.neonatology.org/nicu-net/join.html) are two of the many websites devoted to the exchange of information between staff involved in the care of neonates and infants, and the following are just a few of the new and on-going topics discussed. The opinions expressed do not claim to be evidence-based but will hopefully promote further discussion.



Dressings for peripherally-inserted central catheters (PICC) neonatal-talk

Because these lines are potentially unstable and attached to fragile skin in very small infants, a query from the USA wondered what other units were doing to preserve skin integrity. It would appear that most practitioners covered the insertion point with an occlusive dressing such as Tegaderm™ which was only changed when it became soiled and 'un-occlusive', or once a week. Duoderm™ or the equivalent was not usually put under the hub as removing this could dislodge the catheter. One respondent secured the catheter with steri-strips and then covered with Tegaderm™. These were changed whenever necessary; the soiled steri-strips being soaked off with saline. No problems with skin integrity were reported when using this method.

Use of individual stethoscopes NICU-NET

A member of the Forum from New York was looking for evidence to support using individual stethoscopes for each baby. The many replies all originated from the USA and were all already using individual stethoscopes – and had been for many years. Reasons cited were that stethoscopes are a source of contact transmission of organisms so individual ones are essential to infection control. The practice also contributes to efficient use of staff time and good patient care. In one unit, some staff had their own stethoscopes; these were cleaned thoroughly between each patient. A further unit supplied each baby with a resuscitation kit, which included a stethoscope, on admission.

Comment

Nosocomial sepsis is a frequent occurrence in neonatal units, and the selection of

multiresistant bacteria by the use of broad-spectrum antibiotics is increasing¹. Stethoscopes have been shown to harbour bacteria, which can be reduced though not always eliminated by cleaning with alcohol². It is therefore advisable to have a stethoscope available for sole use on each individual baby, but also to ensure that this is cleaned daily to minimise the growth of bacteria.

1. **Isaacs D.** Unnatural selection: Reducing antibiotic resistance in neonatal units. *Arch Dis Child* 2006; **91**: F72-4.
2. **Breathnach A.S., Jenkins D.R., Pedler S.J.** Stethoscopes as possible vectors of infection by staphylococci. *BMJ* 1992; **305**: 1573-74.

Underwater births NICU-NET

In spite of some midwives and obstetricians actively promoting underwater births, and modern obstetric units being designed with birthing pools, a forum member from the States questioned the safety and validity of giving birth in water. The many replies were mostly against this practice – some saying that there was not enough evidence to condemn or support it. Some admitted that it was offered to mothers regardless of the hazards or evidence to support it. One response suggested that although it was a gentler, less painful method of vaginal delivery for the mother, it hadn't been promoted as a safe or more effective form of birth for the baby.

Comment

This is a controversial subject. Many leading perinatal centres in the UK have birthing pools, yet there is no evidence from well-designed randomised controlled trials (RCTs) to show that underwater birth is safe, let alone beneficial for the infant. In contrast, there have been numerous case reports of adverse neonatal outcome following water birth including water aspiration, snapped umbilical cords,

hyponatremia and infection¹. Such reports do not alone prove that underwater birth is less safe than conventional delivery, but certainly raise significant concerns that should be communicated to prospective parents considering this mode of delivery. I suggest that underwater birth should only be performed as part of an adequately-powered RCT that will determine whether or not this is a safe procedure to perform.

1. **Batton D.G., Blackmon L.R., Adamkin D.H. et al.** Committee on Fetus and Newborn, 2004-2005. Underwater births. *Pediatrics* 2005; **115**: 1413-14.

Teaching parents resuscitation neonatal-talk

With the advent of NICU residents going home at lower weights and gestations, and some still requiring oxygen therapy, it is considered essential that their parents are taught how to resuscitate their infant in an emergency. A query from the US wanted to know who was responsible for this teaching. Again, there were several replies. All these units said CPR teaching was mandatory to parents of infants born at less than 37 weeks +/- a history of apnoeas and those going home with apnoea alarms, monitors and oxygen therapy. In most cases it was the responsibility of the 'named nurse' but in some units the respiratory therapist held classes and encouraged both parents to attend. Although essentially part of the discharge plan, teaching should take place well before the day of discharge. In all cases, the parents were shown a film, given a demonstration and written instructions, and then demonstrated to the nurse that they knew the procedure – possibly at a second class. One unit said CPR was taught by the Outreach Team: at home on the first visit if necessary. Non-compliant parents were of course a problem, but they could only be encouraged and not forced to learn CPR.