

# Hot topics from the web

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**Neonatal-talk** ([www.infantgrapevine.co.uk](http://www.infantgrapevine.co.uk)) and **NICU NET** ([www.neonatology.org/nicu-net/join.html](http://www.neonatology.org/nicu-net/join.html)) are discussion forums for staff caring for premature and sick babies and infants. Below is a synopsis of some of the recent threads, which are not necessarily evidence-based, but will hopefully promote further debate.



## Oral care NICU NET

A nurse from Texas inquired as to what other neonatal units were doing for routine oral care, as adult literature suggests good oral care procedures result in decreased ventilator associated pneumonia. The fact that some units use sterile saline to clean mouths promoted an outcry! Saline must taste awful and to have a dry mouth and add salt water is untenable. No wonder, then, that some infants are reluctant to bottle feed if they are used to something that tastes so unpleasant. Other units used sterile water, and one unsweetened fennel and black tea – tea to sick infants?! Of course, the best solution is to use breast milk as soon as it is available. Not only does it work with enzymes in the mouth to start the digestion process, it is alive with bacteria-fighting white cells and also has a mild analgesic effect.

## Breastmilk storage neonatal-talk

A reader from America questioned whether it was necessary to store expressed breast milk in biohazard bags as per recommendations by their Infection Control Department. None of the respondees appeared to comply to this ruling, although one person thought that they should. All other units apparently adhered to recommendations by the American Dietetic Association and stored breast milk in 'food grade' plastic or glass containers, carefully labelled, milk from the same mother together, and separate from formula milk. One person thought that the containers should be bar-coded like drugs to avoid giving the wrong milk to the wrong infant.

## Flushing of lines NICU NET and neonatal-talk

It would appear from the response that most units now use normal saline (sodium chloride) to flush most venous lines (PICCs, CVLs etc) instead of heparin. Flushing is carried out 4-6 hourly and before and after administration of medications. One respondee questioned whether there was a better alternative as the chloride overload in sick preterm infants could cause metabolic acidosis. The units that used continuous heparin infusions/heparin locks (for central or arterial lines) still flushed the lines with normal saline.

## Neonatal pain assessment and management neonatal-talk

A couple of queries, both from American nursing students, concerned pain in the NICU. They were both interested in which tools were being used to assess pain. Several replies showed that a variety were in use. CRIES (Crying, Requires O<sub>2</sub> for saturation above 95%, Increased vital signs, Expression, Sleepless) apparently works with bigger babies (34-35 weeks' gestation – particularly following surgery), whilst PIPP (Premature Infant Pain Profile) is used for those under 34 weeks. NIPS (Neonatal Infant Pain Scale) and NPASS (Neonatal Pain, Agitation and Sedation Scale) are also in use.

Both students were aware that opioid analgesia causes unwanted side effects particularly respiratory depression and wondered what other units were using as alternatives. One of them quoted research<sup>1</sup> showing that Ketorolac tromethamine (a new and potent non-steroidal, anti-inflammatory analgesic) represented an efficacious alternative to opioids, avoiding

side effects. Unfortunately, there was no response to show that this drug was being used. However, a further inquiry about the use of oral sucrose to reduce pain scores provoked much more response, and showed that its use is now much more common – albeit with restrictions on gestation and clinical status.

1. Papacci, P., De Francisci, G., Lacobucci, T. et al. Use of intravenous Ketorolac in the neonate and premature babies. *Pediatric Anesthesia* 2004; **14**(6): 487-92.

## Cord care NICU NET

An inquiry about care of the umbilical cord revealed a variety of protocols. However, most units appeared to let the cords air dry without the use of triple-dye or alcohol. Although some units bathed their infants whilst the cord was intact (depending on the baby's clinical condition), some used 'sponge-bathing' until the cord was off. According to recommendations by the AAP and the ACOG<sup>1</sup> 'no single method of umbilical cord care has proved to be superior'.

1. AAP and ACOG standards. Guidelines for Perinatal Care (5th Edition). *American Academy of Pediatrics* 2002: 204-05.

## Clinical dilemmas [www.kid-info@yahoo.com](mailto:www.kid-info@yahoo.com)

Several different clinical scenarios for discussion/diagnosis have been discussed. The subjects getting the most response at the moment are *Pseudomonas pneumonia*; parental presence during resuscitation; a 4.1kg baby (with an epileptic father) having increasing respirations, duskiness and glycosuria at two hours of age; and delivery of a baby with an antenatal echogenic area in the lung.