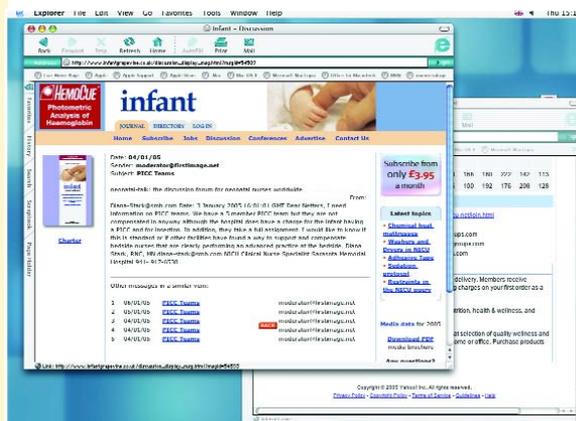


Hot topics from the web

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Neonatal-talk (www.infantgrapevine.co.uk) and NICU-NET (www.neonatology.org/nicu-net/join.html) are just 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 a few of the many new and on-going topics discussed. The opinions expressed do not claim to be evidence-based but will hopefully promote further discussion.



Preparation of medications neonatal-talk

An Australian nurse prompted an interesting debate on the subject of drug preparation. Her unit was looking at the possibility of all their infusions and drugs for infusion being prepared in the pharmacy in patient-specific doses and delivered to the unit labelled and ready to administer. The theory was that this would eliminate calculation errors, reduce infection risk from re-using ampoules and cut costs by not discarding 'once-only' ampoules.

Replies from both nursing staff and pharmacists were mostly very positive. One US unit pharmacy that operates 24/7 prepares 150-200 doses of drugs per day. A 24 hour supply is delivered to the NICU once daily, and new prescriptions are processed and enough doses sent to the unit to last until the next 'top-up'. Dose calculations are double checked and as a pharmacist attends ward rounds, a further check can be made if necessary. As the drugs are drawn up using a sterile aseptic technique rather than the open air of the NICU, infection is reduced; and cost is reduced as vials can be used for more than one dose. There was only one negative comment that this was very labour intensive and funding was not available.

Incubator humidity NICU-NET

It is recommended that very small infants require a humidified atmosphere to counteract insensible fluid losses thus assisting fluid management. A lengthy discussion arose following a query about humidity use from Memphis. Respondents from as far afield as Australia, Switzerland and the States, all changed their incubators, and thus the humidity unit, on a weekly basis. It appeared that the humidity unit was usually topped up when necessary with

sterile water. A couple of NICUs admitted to cleaning the chamber before each top-up for fear of colonising *Pseudomonas aeruginosum*. One American NICU did not use the integral humidity system but used a supplemental system for babies under 1000g which was also changed every seven days. Another NICU provided humidity in an aerolised mist, which theoretically does not allow water-borne infection. Levels of 50-85% were quoted as being used.

Use of emollients in the NICU NICU-NET

A query, again from the US, asked if it was safe to use oil- or petroleum-based products on the skin of infants who were receiving oxygen, phototherapy or who were under radiant heaters. One reply suggested that as grease and oil are incompatible with heat, they should be avoided because of the risk of fire. One unit used coconut oil, but not under phototherapy. Several units used Aquaphor™ which apparently works very well and helps with warming micropremes, as it prevents transepidermal water loss, but does not absorb heat. However, another unit found that this product increased bacterial growth when used under a radiant heater, and used nothing. A further comment was that oil is OK under phototherapy as light should not get reflected, oil being less dense than other emollients. It was stressed that skin care is essential between applications of any skin product, to avoid build up.

Fixation of umbilical artery catheters (UACs) NICU-NET

Staff at a unit which for years secured its UACs with Tegaderm™ without problem, were wondering whether to change to the 'bridging' method and queried what other units were doing. A variety of methods was

used, including 'bridging', stitching, and fixing with Tegaderm. 'Bridging' was not used in several units that had witnessed a baby getting his toe in the loop and pulling out the UAC, but others thought it was a better method in case the UAC needed to be pulled back after X-ray. Some made a bridge and stuck the inferior margin to the skin; to which others commented that a 'strong' stick was necessary which was not traumatic to fragile skin. Some people were concerned that Tegaderm, being occlusive, was an infection risk, although most respondees emphasised that they left the umbilicus open to air. In some cases, Duoderm™ was stuck to the skin above the umbilicus then the UAC was looped and stuck to this with Tegaderm, with the comment that this method was more comfortable when the infant was nursed prone.

Pacifier use neonatal-talk

This frequently discussed topic has been raised again, as recent AAP guidelines suggest that sucking on a pacifier can help prevent SIDS. The guidelines suggest that pacifier use should be withheld in breast fed babies until feeding is well established to prevent 'nipple confusion'. The questioner wondered if practices had changed as a result of this new information. It would appear not – the Baby Friendly Initiative is against the use of pacifiers as they believe that they interfere with lactation, discourage breast feeding and may cause otitis media. Pacifiers are thus discouraged on postnatal wards and while on the NICU each baby should be assessed as to whether its condition warrants the use of a pacifier (e.g. post surgery, long term TPN), but one should only be given with the parents' permission. Parents should also be informed of both the risks and benefits on discharge.