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** have had lots of activity in the last few weeks. Here is a small collection of the diverse subjects that are being discussed. It must be remembered that these are just the views and opinions of individuals and the comments cannot be considered as evidence based or necessarily the basis for good practice. Hopefully, this page will promote further input from *Infant* readers.

Vapotherm
neonatal-talk

Vapotherm is a relatively new form of non-invasive ventilation. It delivers high oxygen flow rates, which are heated and humidified via nasal cannulae. The user can set the oxygen between 21 and 100% and flows of the mixed gas between 1 and 8 litres per minute[1]. An initial posting asked whether units were using it and what the criteria were. The replies varied considerably. One respondee was using Vapotherm on a baby with severely hypoplastic lungs who had previously been on 6cm of NCPAP in 80% FiO_2. He was described as completely miserable. Vapotherm had turned his life around, and he was much more comfortable in 5-6Lpm of 30-40% O_2. He was consolable and his parents were much happier.

Another unit had been using Vapotherm for 18 months, extubating to one day of nCPAP followed by Vapotherm commencing at 4 litres O_2. Their patients were much more comfortable because it was less drying to nasal passages. The warmed humidified air also seems to help with suctioning secretions. However, a minus point was that their infants required diuretics when on Vapotherm. No one else expressed this as a concern.

A further respondee used it regularly in her unit – mostly for cardiac patients with whom it has been very successful. She added the comment that they keep patients nil by mouth if they are receiving over 3 Lpm. A couple of units who had had babies on it for several weeks were planning to send them home on it. One unit was concerned about infection because the water source apparently remains open, and they were sending weekly nasopharyngeal swabs for culture.

Vapotherm would seem to be a very successful alternative to nCPAP and long-term ventilation. However, all the respondees were from the US. Is anyone in the UK using it?

1. **O'Brien, KE.** Vapotherm www.chw.org/display/PPF/DocID/10881/router.asp

Parent forums
PreemieParenting@yahoogroups.com
PreemieChat@yahoogroups.com

These two groups are very reassuring for parents of sick infants and children. The parents write in and compare notes and give advice to similarly concerned 'others' on all sorts of problems. Recent conversations have been about RSV, gastrostomy feeds, car seats, kangaroo care, growing up, tantrums, problems with premature infants and the highs and lows of life in the NICU.

Treatment of jaundiced infants
NICU-NET

A recent very interesting posting stating that a doctor successfully treated a baby (2.9kg) with a serum bilirubin of 27mg/dL with phototherapy and isabgol husk, instead of performing an exchange transfusion, promoted a barrage of replies. (The isabgol stimulates bowel evacuation thereby increasing enterohepatic circulation). He queried whether the exchange era was gone.

More than one respondee was very concerned about the long-term outcome of the baby – ie neurologically and audiologically. However, one physician thought that in a stable term baby with an SBR of below 30mg/dL, phototherapy alone would suffice.

It would appear that most people think that exchange transfusions should continue to be performed in the face of rising bilirubin levels in spite of phototherapy as per individual unit guidelines and AAP recommendations[1]. However, several people suggested a proper controlled trial.

1. **AAP Policy**. Management of hyperbilirubinaemia in the newborn infant 35 or more weeks of gestation. *Pediatrics* 2004 ; **114**(1): 297-316.

Co-bedding
neonatal-talk

Units varied as to whether or not they still co-bedded multiples. One unit continued because parents liked it, although occasionally it had to be discontinued because twins were disturbing each other's sleep or pulling out each other's nasal cannulae causing desaturations. The nurses taught proper positioning for the prevention of SIDS and parents learned CPR before discharge.

Another unit had stopped co-bedding because of the risk of SIDS: at least they only allowed it when the babies were awake. A further respondee always co-beds multiples and find that they are more thermally stable and have less desaturations and less bradycardias. One concern was that as parents copy what they see, infants should not be co-bedded and parents should be taught that nothing should be in the cot except for the baby. Nobody mentioned the possibility of the risk of infection[1,2].

1. **Hudson-Barr, D., Lewallen, LP.** Second opinion: Should nurses promote co-bedding of multiples? *MCN* 2003; **28**(6): 348-49.
2. **LaMar, K., Taylor, C.** Share and share alike: Incidence of infection for cobedded preterm infants. *JNN* 2004; **10**(6): 197-200.