However, it has been suggested that neonates exposed to hypoxic injury are at increased risk of developing necrotizing enterocolitis (NEC) and so feeds should be withheld until re-warming.³

A national survey was performed to gain insight into current approaches towards enteral feeding during therapeutic cooling. **Methods** Hospitals were contacted by telephone and asked standardised questions about nutritional practice during cooling. 42 of the 47 units to provide cooling in the UK supplied information.

Results 67% of hospitals had no guidelines or had guidelines that failed to provide information with regards to starting enteral feeds during cooling.

79% do not give enteral nutrition during cooling. Of these, 24% of guidelines cited risk of NEC/GI complications as justification. 70% offered no reasoning for the recommendation.

In these units, 45% began patients on TPN ($\pm$ lipids), while 55% provide only IV fluids.

No units give full enteral nutrition, however 21% of units provide trophic feeds, preferentially using expressed breast milk most frequently at a rate of 1 mL 1–4 hly, with supplemental IV fluids and no adjunctive TPN.

Conclusion This survey concludes that there is no uniform approach to nutrition during therapeutic cooling in neonates within the UK.

Further research and subsequent guideline development is essential to ensure optimal treatment is given to this patient group.

REFERENCES

- 1 JY Ting, D Manhas, SM Innis, S Albersheim, Elevated Triglycerides Levels in Two Infants With Hypoxic-ischemic Encephalopathy Undergoing Therapeutic Hypothermia and Receiving Parenteral Nutrition. *JPEN J Parenter Enteral Nutr.* 2013 Jul 26, Epub ahead of print
- 2 The UK TOBY Cooling Register – Clinician's Handbook Available: <https://www.npeu.ox.ac.uk/tobyregister/docs> Accessed: 07/04/2014
- 3 R Mosalli, Whole Body Cooling for Infants with Hypoxic-Ischemic Encephalopathy, *J Clin Neonatol.* 2012 Apr-Jun; 1(2): 101–106

PO-0582 FEEDING DIFFICULTY IN LATE PRETERM INFANTS

¹S Arayıcı, ¹G Kadioglu Simsek, ¹E Alyamac Dizdar, ¹F Sari, ¹G Kanmaz Kutman, ¹FE Canpolat, ¹S Oguz, ¹N Uras, ²U Dilmen. ¹Neonatology, Zekai Tahir Burak Maternity Teaching Hospital, Ankara, Turkey; ²Neonatology, Yildirim Beyazit University School of Medicine, Ankara, Turkey

10.1136/archdischild-2014-307384.1224

Background and aims Compared with term infants, late preterm infants have higher risks for morbidities such as respiratory distress, hypothermia, hypoglycemia, hyperbilirubinemia and feeding difficulty. The aim of this study to investigate incidence and clinical characteristics of feeding difficulty in late preterm infants.

Methods A total of 426 infants were enrolled. We evaluated the clinical and demographic characteristics and feeding difficulty of late preterm infants.

Results 54 infants had feeding difficulty. There were no differences in gestational age and birth weight among the groups. Mean intolerance day was 2.3 ± 1.2 days. Compared infants with feeding intolerance and non-feeding intolerance full enteral feeding time 8 ± 2.3 days and 5.2 ± 1.7 days, respectively ($p < 0.001$). Feeding with breast milk rates was similar between the groups. Prokinetic use in the feeding intolerance group was 46% ($n = 25$). Subgroup analysis between prokinetic users and non-

users there were no differences in full enteral feeding time and duration of parenteral nutrition.

Conclusions Late preterm infants should be followed closely for the complications such as feeding difficulty.

PO-0583 IS THERE AN ASSOCIATION BETWEEN FUNCTIONAL GASTROINTESTINAL DISORDERS IN THE FIRST THREE MONTHS OF LIFE AND MATERNAL PSYCHOLOGICAL PROBLEMS?

¹ME Baldassarre, ²G Castoro, ³M Fanelli, ¹R Maurogiovanni, ¹A Resta, ²S Amoroso, ²R Cassibba, ¹N Laforgia. ¹Department of "Scienze Biomediche ed Oncologia Umana"- Neonatology and NICU Section, University of Bari, Bari, Italy; ²Dipartimento di Scienze della Formazione Psicologia Comunicazione, University of Bari, Bari, Italy; ³Dipartimento Interdisciplinare di Medicina Sez. Diagnostica Per Immagini- U. O. Medicina Nucleare Policlinico, University of Bari, Bari, Italy

10.1136/archdischild-2014-307384.1225

Aim of the study To investigate whether functional gastrointestinal disorders (DFGIs), defined according to Rome III criteria, are associated with postpartum mood disorders.

Methods 113 mother/child pairs were enrolled in this perspective, longitudinal study. Maternal depressive symptoms were evaluated at birth, one and three months after delivery using Maternity Blues, Edinburgh Postpartum Depression Score (EPDS) and Symptom Check List for Anxiety and Depression. The Adult Attachment Interview (AAI) was used to determine the attachment style of the mother. Any sign/symptom was recorded weekly for the first three months of life, together with type of feeding. Statistical analysis (SPSS software): χ^2 test, student t-test, linear regression.

Results 37 (32,7%) newborns were exclusively BF. 16 (14,2%) newborns had regurgitation, 10 (9,7%) colics, 4 (3,5%) dischezia and 10 (9,7%) constipation. 60 (53,1%) mothers had postpartum depression and/or anxiety. 53,6% of infants with regurgitations had a depressed mother vs 23% of infants without regurgitations ($\chi^2 = 10,63$, $p = 0.003$); 45,2% of infants with colics had a depressed mother vs 15,9% of infants without colics ($\chi^2 = 10,63$, $p = 0.001$). A mother's insecure attachment style was found in 36% of infants with persistence of regurgitations until third months of life vs 1,8% of infants with mother's secure attachment style ($p < 0.001$).

Conclusion Postpartum maternal depressive symptoms and anxiety are associated with infantile colic and regurgitations. Screening and early intervention in cases of postpartum depression could be useful to avoid inappropriate nutritional and pharmacologic treatments, promoting the health of both mother and infant.

PO-0584 WITHDRAWN

PO-0585 EFFECT OF LONG TIME LOW TEMPERATURE PASTEURISATION (LTLT) AND LYOPHILIZATION ON FATS OF HUMAN MILK BANKING (HMB)

¹D Lamireau, ²C Vaysse, ²L Couedelo, ³P Perez, ⁴C Billeaud. ¹Lactarium Bordeaux-Marmande, CHU Bordeaux, Bordeaux, France; ²ITERG, Université de Bordeaux, Bordeaux, France; ³USMR, ISPED CHU Bordeaux, Bordeaux, France; ⁴CIC Pédiatrique Neonatology and Nutrition, CHU Bordeaux, Bordeaux, France

10.1136/archdischild-2014-307384.1226