(p=0.001). Positive correlation between noise exposure and duration of hospitalization was determined. Infants who failed at 1001 and 1501 Hz had similar Bayley II Infant Development Scale scores and there were no difference between groups.

Conclusion Major noise source in NICU was found to be the incubators. Although hearing loss was not detected in any infants, hearing tests at sixth months of life were adversely affected.

1281 A COMMON PROBLEM FOR NEONATAL INTENSIVE CARE UNIT'S: LATE PRETERM INFANTS

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Background Late preterm infants are physiologically and metabolically immature than term infants, and the incidence of late preterm birth is increasing. These infants have higher risks of medical complications such as respiratory distress, hypoglycemia, hyperbilirubinemia, sepsis, feeding difficulty and poor neurodevelopmental outcome than term infants.

Objective We aimed to evaluate the clinical and demographic characteristics, and short-term outcomes and clinical course of late preterm infants who were admitted to our neonatal intensive care unit (NICU).

Materials and method Data from NICU admissions of 605 late preterm and 1477 term infants in 1 year period between June 2010 and May 2011 were analyzed.

Results Late preterm and total delivery numbers were 2004 and 18854. NICU admission rate of late preterm infants was 30%, respectively. Mean gestational week and birth weight were $35^{1/7}$ w and 2352 g. Admission diagnosis were respiratory distress (46.5%), low birth weight (17.5%), jaundice (13.7%), polycythemia (8.1%), hypoglycemia(4%) and feeding difficulty (13.1%), and these morbidities' rates were higher than term infants (p<0.001). During hospital stay; jaundice, polycythemia, hypoglycemia, feeding difficulty, sepsis, apnea and pneumonia rates were 300 (49.6%), 98 (16.2%), 88 (14.5%), 218 (36%), 85 (14%), 7 (1.2%) and 27 (4.5%), respectively. Overall mean hospitalization length was 7.5±9.1 days. Mortality and rehospitalization rate was 2.1% and 4.4%, and higher than term infants (< 0.001).

Conclusion We concluded that late preterm infants should be followed closely for these complications just after birth and preventive strategies should be put in practice.

1282 AN ANALYSIS OF RETINOPATHY OF PREMATURITY REQUIRING TREATMENT OVER 5YEARS PERIOD IN OUR NEONATAL UNIT

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Background Proliferative retinopathy occurs primarily in premature LBW infants as a result of incomplete vasculogensis of the retina at the time of birth. It can be mild, self limiting with no visual defects or progressive leading to blindness.

Screening guidelines

1. Birth weight < 1.5Kg.
2. Gestational ane < 32 weeks.
3. Birth weight 1.5kgs– 1.8kgs and/or Gestational age 32–34 weeks (if received supplementary oxygen for ≥ 12hours.
4. If one twin is in the screening criteria and has eye changes.

Aim To review the number of babies < 1500g, and or Gestational age of < 32/40 who developed ROP required treatment, focusing on infants < 1Kg.

Methods Retrospective chart review of babies born in the Regional Maternity Hospital Limerick between 1st Jan 2007 and 31st Dec 2011 with ROP requiring treatment.

Results During the study period a total of 225 infants with B.wt < 1500g and/or G.A < 32/40 were admitted to the neonatal unit. All these infants were screened for ROP as per unit guidelines. 93.3% (N=210) infants were < 32/40, and 83%(N=187)< 1500g, of these 28%(N=64) infants weighed less than 1Kg.

There were 10 infants (4.4%) who developed ROP requiring treatment, 9 of these infants were in the ELBW category, the tenth baby was only 40gs over the criteria for VLBW(B.wt 1040gs).

All 10 babies have disease in zone 2.7 stage2. 2stage1 and one had stage 4.

Conclusion In our unit 10 infants(4.4%)received treatment for ROP over the 5 years period 2007–2011. Our figures are comparable to those reported by Vermont Oxford Network database 2010.

1283 MONITORING THE EFFECT OF NEUROMUSCULAR BLOCKADE IN NEONATES: CURRENT PRACTICE IN THE UNITED KINGDOM

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Background and Aims Neuromuscular blocking agents (NMBAs), either intermittent boluses or continuous infusions, are used in infants to facilitate difficult ventilation and lower pulmonary pressures by preventing infant-ventilator asynchrony in e.g. severe meconium aspiration syndrome, persistent pulmonary hypertension or air leak.

Whilst consensus statements and accepted standards regarding NMBA use and assessment exist in adult and paediatric ICU, there exists limited information in NICU, specifically whether clinical assessment, NMBA-monitoring (train-of-4) or formal acceleromyography is optimal. We wanted to ascertain current NMBA monitoring in UK NICU.

Methods Literature search for NMBA assessment in infants and telephone survey of all tertiary NICUs in England, and major units in Wales, Scotland and Northern Ireland, in which we asked the nurse in charge (to ascertain actual rather than perceived optimal practice) about existing protocols, methods used for NMBA monitoring (clinical observation, TOF/acceleromyography) and the use of 'drug holidays'.

Results No standards, or peer-reviewed NMBA guidelines were found. Of 56 units contacted, 2 did not share information and 3 use intermittent boluses of NMBAs rather than continuous infusion. Of the remaining units all (100%) clinically assess the patient, 1 (1.96%) has a protocol in place, 11 (21.57%) perform regular NMBA-holidays to assess effect and 1 (1.96%) uses train-of-4 if a patient on NMBA-holiday does not move after 6 hours.

Conclusions We found no peer reviewed NICU-NMBA standards or guidelines in the literature, Only 1 UK unit has any protocol for NMBA assessment. Guidelines/standards for NMBA use in infants need to be urgently introduced.

1284 A NETWORK PERSPECTIVE OF THE MAJOR OUTCOMES OF PREMATURE BABIES LESS THAN 31^{+0} WEEKS GESTATION USING A UNIFIED ELECTRONIC SYSTEM

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Background The Badger electronic system collects data in a standardized manner and allows us to audit the major outcomes of the babies managed within the network.

Aim To analyse the major outcomes of babies born less than 31 weeks gestation.
Methods We extracted the data solely from the Badger system to analyze the outcomes of all babies less than 31 weeks gestation in the last 2 financial years (01/04/09 to 31/03/11).
Results A total of 860 babies less than 31 weeks gestation were admitted to the neonatal units in SWMNN in the last 2 financial years.

Abstract 1284 Table 1

	2009/2010	2010/2011	Total
n admissions < 31+0 weeks	437	423	860
n ventilated (%)	301 (68.8%)	287 (67.8%)	588 (68.3%)
n with CLD at 36 weeks CGA (%)	78 (17.8%)	62 (14.5%)	140 (16.2%)
n discharged home on oxygen (%)	20 (4.5%)	28 (6.5%)	48 (5.5%)
n with NEC (%)	111 (25.4%)	102 (24.1%)	213 (24.7%)
n with NEC that had surgery (%)	15 (3.4%)	21 (4.9%)	36 (4.1%)
n survived to discharge (%)	375 (85.8%)	382 (90.3%)	757 (88.0%)

Conclusion The Badger system has tremendously improved our ability to monitor trends in the major outcome of premature babies in SWMNN. This will help in improving the quality of care and resource allocation. The major limitation of such a system is that the quality of the data is dependent on the information entered in the first place. Therefore, we need to ensure the accuracy and completeness of the data entered.

1285 DEVELOPMENTAL DYSPLASIA OF THE HIP (DDH) AND MATURATION OF HIP JOINT: ANALYSIS IN UNSELECTED ITALIAN PEDIATRIC POPULATION

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Background Developmental Dysplasia of the Hip (DDH) is an abnormal growth of the hip structures, regarding both osseous and soft tissues. While different factors are strongly associated and the overall frequency reported is between 1 and 5 cases per 1000, its aetiology and prevalence are not well established.
Aim Aim of our study was to assess the relationship between the presence of hip ossification core and hip dysplasia and to evaluate the overall prevalence of this disorder among our population.
Methods the same examinator performed hip ultrasonography (US) to all babies, using Graf method and a questionnaire about biological data was administered to all parents.
Results 947 US were performed to all patients between the 2° and the 22° week of life (493 male, 454 female) 934 US were normal, 10 showed physiological hip immaturity, only 3 demostrated pathological hip conformation (2 with IIC grade and 1 with IV grade). The presence of hip ossification core doesn't correlate with DDH, nutritional factors and fetal presentation but had a strong relationship with birth weight and female sex.
Conclusions our data about the prevalence confirmed the previous results, (3.1/1000): The presense of hip ossification core is not related with DDH.

1286 ASSESSMENT OF RENAL AND INTESTINAL TISSUE CONDITION OF IUGR INFANT

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Background As known, the main cause of IUGR is uteroplacental insuffiency accompanied by continuous hypoxia. The fetal circulatory response to hypoxia is a rapid centralization of blood flow into the brain, heart and adrenals at the expense of almost all peripheral organs, particularly the kidneys and intestines.
Aim To determine whether the IUGR has an influence on renal and intestinal function due to hypoxia-ischemia in the early neonatal period.
Material and Methods 39 preterm newborns (GA 29–36 weeks) have been studied. We compared IUGR (n=20) and non-IUGR newborns (n=19). Plasma and urine samples were taken on the 1st, 3rd and 7th day of infant's life. KIM-1, uNGAL and plasma TFF-3 concentration were assayed by IFA method.
Results Comparing the two group levels of uNGAL, KIM-1 and TFF-3 were significantly increased in IUGR group (39.9±7.4 vs 25.8±6.5 ng/dl), (1.6±0.2 vs 0.8±0.1 ng/dl) and (38.1±1.5 vs 20.7±0.9 ng/dl) in the first three days of life. Considerable decrease in the concentration of TFF-3 was observed on the 7th day of the study (26.3±1.5 vs 28.3±2.6 ng/dl).
Conclusion Increase of KIM-1 and NGAL demonstrate high risk of hypoxic-ischemic renal injury in IUGR infants, and high level of TFF-3 reflects compensatory mechanisms in intestine in response to tissue hypoxia, but decreased level of TFF-3 in the dynamics is an evidence of failure and rapid depletion of the protective mechanisms in IUGR newborns.

1287 DOES CORD SEPERATION TIME HAS AN EFFECT ON OMPHALITIS?

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Background and Aim There is still controversy regarding the optimal umbilical cord care and the relationship between cord separation and omphalitis. The aim of our study is to investigate the impact of different umbilical cord care practices on the cord seperation time and omphalitis.
Methods We included 514 newborns and randomly randomized them into six groups (Group 1: dry care (n:72); groups 2 (n:69), groups 3 (n:69) and 4 (n:76): a single application of 70% alcohol, 4% chlorhexidine or povidon-iodine in the delivery room, groups 5 (n:73) and 6 (n:62): a single application of 70% alcohol or 4% chlorhexidine in the delivery room and continued until discharge) and 421 of them completed the study. Umbilical cord was examined on the 2nd day and between 5–7 days of life for the signs of omphalitis. Babies were followed up for one month and cord seperation time was recorded.
Results Cord separation time was the shortest for group one (6.40 ±1.36 day) and the longest for groups 3 and 6 (9.57±3.12 days and 9.58±4.07 days) ($p<0.001$). Omphalitis was detected in eight patients (1.9%) and there was no significant difference between the groups. There was no relationship between umbilical cord separation time and incidence of umbilical cord infection ($p>0.05$).
Conclusion Our study showed that the mean time of cord separation was significantly shorter (6.40±1.36 days) in the dry cord care group and the longest in both chlorhexidine groups. However, cord seperation time did not have an impact on the rate of omphalitis.

1288 TOTAL OXIDANT LEVELS, TOTAL ANTIOXIDANT LEVELS AND PARAOXONASE LEVELS IN BABIES BORN TO PREECLAMPTIC MOTHERS

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