group without the need for any therapy as a result of high bilirubin and hematocrit levels.

Neonatal Pulmonology

PO-0726 INTERNATIONAL SURVEY ON PERI-EXTUBATION PRACTICES IN EXTREMELY PREMATURE INFANTS

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Background Weaning of mechanical ventilation (MV), assessment of extubation readiness and provision of post-extubation support are critical steps in the care of extremely preterm infants (< 28 weeks). The use of evidence-based practices during the peri-extubation phase is paramount for ensuring successful outcome.
Objective Determine the peri-extubation practices used in extremely preterm infants internationally.
Methods From Oct 2013 to Feb 2014 a structured questionnaire with 15 questions related to peri-extubation practices was circulated to the clinical directors of 162 neonatal intensive care units across Canada, USA, Ireland, Australia and New Zealand.
Results 112 directors responded to the questionnaire (69%). The majority of units do not have written protocols for any aspect of MV (64%). The decision to extubate is generally made by the attending neonatologist (99%) or neonatal fellows (71%), based on ventilator settings, blood gases and haemodynamic stability; 16% of units extubate infants based on Spontaneous Breathing Trial (SBT). The SBT's varied on definitions of failure and durations; from <5 min (59%) to >10 min (35%). The majority of infants are extubated ≤3 days of life (76%) to nasal CPAP (84%). The failure rate was estimated to be 10–30%, but there was lack of consensus on the definition of failure (re-intubation within 24, 48 or 72 h after extubation). The decision to reintubate was almost always based on clinical judgement of physicians (88%), rather than well defined re-intubation criteria.
Conclusions Peri-extubation practices in extremely preterm infants are not always evidence based and frequently physician-dependent. High quality trials are required to inform guidelines and standardise practices for this important aspect of neonatal intensive care.

PO-0727 PREDICTORS OF DIFFICULT ENDOTRACHEAL INTUBATION OF INFANTS IN NICU-KAMC, RIYADH, KSA

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Background and aim Intubation in NICU is a daily procedure, that may be associated with serious complications. We studied the effect of different factors that may contribute to the difficulty and success of semi elective endotracheal intubation of sick infants managed at NICU of KAMC-Riyadh.

Methods A retrospective review of prospectively collected data of infants that had semi elective endotracheal intubation from 1/1/2010 till 1/7/2011. The studied factors were : experience of intubating physician, body weight and post conceptional age (PCA) of the infants, premedication. Success of intubation was assessed by number of trials, pain score, and occurrence of bradycardia and or desaturation.
Results 180 infants had semi elective intubation. Birth weight (490–4995 gms), PCA (25 to 53 weeks). Premedication was used in 108 infants; Fentanyl:66, Midazolam : 33 infants, and both medications: 9 infants.

Univariate analysis showed that difficult intubation (need for ≥3 trials of intubation) positively correlates with junior intubating physicians ($p < 0.001$) and bradycardia (heart rate <80/min) was associated with smaller body weight (p: 0.036).

Multilogestic Regression analysis showed independent correlation between difficulty of intubation and total number of attempts of intubation with the junior (RI, and R2 & Service physicians of less than 12 months experience) intubating physician (p 0.001 and 0.01).

Using premedication had no contribution to success of intubation, number of attempts of intubation and occurrence of Bradycardia and/ or desaturation.
Conclusion The only predictor of difficult intubation of infants in NICU in our study was having intubation by junior physician, while premedication did not contribute to the success of intubation.

PO-0728 LUNG LAVAGE WITH DILUTE PORCINE SURFACTANT FOR MECONIUM ASPIRATION SYNDROME: A RANDOMISED CONTROLLED STUDY, A PRELIMINARY REPORT

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Background and aims Meconium aspiration syndrome (MAS) is an important cause of severe respiratory failure in newborn infants. The aim of this study was to evaluate the efficacy of lung lavage with dilute porcine surfactant in ventilated infants with MAS.
Methods In this prospective randomised controlled study ventilated infants with MAS with a gestational age ≥36, birth weight ≥2000 g included. Enrolled infants randomised into two groups; in group 1, two sequential 15 mL/kg aliquots of dilute porcine surfactant (Curosurf, Chiesi Farmaceutici S.p. A., Parma, Italy) with a phospholipid concentration of 5 mg/ml were instilled into the lung. In group 2, 100 mg/kg of porcine surfactant were administered as a bolus. Infants in both groups were evaluated and compared with regard to efficacy, morbidity and mortality.
Results Fourteen infants were randomised. There were no significant differences between two groups in term of demographic characteristics. Median duration of respiratory support was longer in bolus surfactant group, although the difference was not statistically significant (2.2 vs. 7.2 days, $p = 0.18$). Similarly, duration of oxygen therapy and hospital stay length were shorter in lung lavage group but the difference was statistically insignificant (8.0 vs. 12.7 days, $p = 0.32$, 11 vs. 18.5 days $p = 0.15$, respectively). There were no differences in requirement for high frequency ventilation and nitric oxide between the groups.