oral abstracts

0-044 WITHDRAWN

0-045 INCIDENCE AND OUTCOMES OF SEVERE NECROTISING ENTEROCOLITIS IN INFANTS LESS THAN 32 WEEKS GESTATION: A PROSPECTIVE POPULATION STUDY

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Objectives

Population data for Necrotising Enterocolitis (NEC) are sparse. We determined the incidence, short-term outcomes and antecedent feed exposures of severe NEC in preterm infants in England.

Methods The study comprised infants 23+0 to 31+6 weeks gestation born in 2012 and admitted to 129 (80%) neonatal units in England. Infants with severe NEC (defined as requirement for surgery, histology, or post-mortem) were identified from the National Neonatal Research Database (www.imperial.ac.uk/nndau).

Results Of 6468 infants, 167 (2.6%) had severe NEC; incidence (95% confidence interval) for 23 to 25+6, 26 to 28+5, 29 to 31+6 weeks gestation infants was 8% (6.4, 10), 3.5% (2.7, 4.4) and 0.8% (0.6, 1.0) respectively. Relative Risk reduced with each additional gestational week (0.70 (0.66, 0.74); Poisson regression, p < 0.001). Of infants requiring surgery, 60% received surgery and survived, 30% received surgery and died, and 10% did not receive surgery; all died. Figure 1 illustrates the inverse relationship between gestation and postnatal age at surgery; median days (interquartile range) 23 to 25+6; 27 (13–44); 26 to 28+5–6 (11–35); 29 to 31+6;12 (8–25) (log-rank test, p = 0.02). Antecedent feeding exposures were 8% never fed; 41% exclusively maternal milk; 13% maternal and donor milk; 35% human milk and formula; 3% exclusively formula. Fortifier was used in 12%.

Conclusions Severe NEC remains a devastating disease affecting preterm infants in the first postnatal month. Novel findings are that 1 in 10 affected infants die having been considered too unwell for surgery, and over half were exclusively fed human milk prior to onset.