

NECROTIZING ENTEROCOLITIS (NEC): AN EIGHT YEAR REVIEW

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NEC is a life-threatening gastrointestinal disease in neonates. It occurs in 7% of very low birth weight infants.

Aim: To identify the risk factors for NEC 2002 - 2009 in a tertiary neonatal centre.

Methods: Retrospective chart review of infants with NEC examining demographics, risk factors, morbidity, mortality and length of stay.

Results: 67 patients had NEC (modified Bell stage ≥ 2), comprising 0.83% of admissions to NICU. 38 (57%) were male, 92.5% were < 1500 g. Median gestational age was 27 weeks (range 23+4/7 to 38+4/7), median birth weight was 840g (range 490- 2690g). Median age when NEC developed was 10 days (range 1-60). Perforation occurred in 28/67 (42%) infants, 14/28 (50%) died. Sepsis was proven in 37% of all cases. Four infants had recurrent NEC. Median length of stay was 64 days (range 3 - 176).

Mortality was 33% (22/67), 68% of deaths occurred in infants < 27 weeks.

Risk factors for developing NEC were: assisted ventilation 83.5 %, RDS 82%, PDA 56.7% , sepsis 37.3%, premature rupture of membranes 31.3%, IUGR 30%, red cell transfusion 30%, and IVH grade (3-4) 24%. Feeding was: never fed 30%, EBM 53%, formula 10.4%, mixed 5.9%.

Conclusion: The aetiology of NEC is poorly understood but prematurity remains the greatest risk factor. The results of a recent updated meta-analysis of probiotics for preventing NEC “confirms the significant benefits of probiotic supplements in reducing death and disease in preterm neonates” (Deshpande et al, Pediatrics 2010). Hopefully, their use will decrease the incidence of NEC.