

has had a measurable impact on neonatal survival rates.

Method: We retrospectively collected data from District General Hospital (DGH) Z, between 1999-2009, especially looking at admission, survival rate and cause of neonatal death in different birth weight groups: above 2500g(A), 2000-2500g(B), 1500-2000g(C), 1000-1500g(D) and less than 1000g(E).

Results: In group A there has been no change in survival. There have been an increase in the number of admissions and survival of very low birthweight (VLBW) infants in groups D and E. Respiratory problems are one of the main causes of death in DGH Z.

Conclusion: We have demonstrated a changing pattern of admission to the neonatal unit with better survival following the introduction of treatments such as CPAP with established links between institutions. The introduction of standardised protocols and staff training has made a difference. Further improvements in survival could be achieved by introducing formalised Neonatal Life Support resuscitation courses for all staff, medical and nursing, involved in neonatal care.

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AIR VERSUS OXYGEN IN NEONATAL RESUSCITATION - A REGIONAL AUDIT AND GUIDELINE

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Introduction: Recent meta-analyses of randomised controlled trials have demonstrated that air may be effective as and arguably safer than oxygen during neonatal resuscitation (NR). Measured outcomes include reduced neonatal mortality and oxidative stress with reduced chronic lung disease. National and International Guidelines now recommend initiating NR in air. Available guidance is limited regarding FiO₂ increments and variations in gestation. A local audit was taken to determine the resuscitation practice using air or 100% oxygen during initial NR in the Cheshire and Merseyside Neonatal Network (CMNN). We also present a resuscitation-in-air guideline recently implemented at Liverpool Women's Hospital (LWH).

Method: Lead Clinicians from all eight hospitals within CMNN were sent electronic questionnaires on NR guidelines and practice.

Results: All Clinicians responded by e-mail. Two centres initiate resuscitation in air for term and pre-term infants. Six centres reported policies to initiate resuscitation in 100% oxygen. Six centres had gas blenders to facilitate administering lower concentration of FiO₂. Practice for assessment of oxygen requirements varied, including visible estimation of cyanosis, changes in HR and saturation monitoring. Two centres had changed NR guidelines in past five years. Following the audit, LWH introduced a resuscitation guideline, including pulse oximetry and inspired oxygen titration guidance.

Discussion: Initial NR practices varied within the CMNN and may reflect similar variation in the UK. Six out of eight centres did not initiate resuscitation of term infants using air as recommended by NICE. The guideline for resuscitation in air is suggested to enable a consistent nationwide approach to NR.

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DOES INTRAPARTUM OXYTOCIN DURING LABOUR AFFECT FETAL HORMONE STATUS?

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Background: Oxytocin is a common drug used during labour. The placenta is not an effective barrier to the passage of drugs, and the blood/brain barrier is under-developed in the fetus. Therefore, the assumption that oxytocin does not cross the placenta and the fetal blood/brain barrier have been questioned. Cortisol (a stress hormone) in umbilical cord may vary between various methods of delivery and analgesia.

Aims: The objective of the study is to evaluate the effect of intrapartum exogenous oxytocin used during induced labour on fetal stress hormone status.