

NEONATAL CPAP TRANSFERS IN YORKSHIRE & HUMBER - EMBRACE TRANSPORT SERVICE

S. Babarao¹, C. Smith², C. Harrison², S. Hancock²

¹Sheffield Children's Hospital, ²Transport, Sheffield Children's Hospital, Sheffield, UK

Background & aims: From a central non-hospital base, the Embrace transport team co-ordinates paediatric & neonatal transfers in Yorkshire & Humber. It completes about 40 transports a week. Embrace transfers babies on CPAP support. Our aim was to review and evaluate our performance and adverse events during stabilisation & transit with regards to neonatal CPAP transfers.

Methods: Retrospective audit of all neonatal CPAP transfers during the period April - August 2010

Results:

Number of neonatal transfers during the period: 603

Number of babies on CPAP at referral: 94

Number of babies transferred on CPAP: 51 (8.5% of total neonatal transfers)

Nurses and ANNPs led the transfer in 65% (Back transfers) and middle grade doctors in 35% (Acute sick babies).

The stabilisation time was < 60 minutes in 20 (39%), 60-120 minutes in 45% and > 120 minutes in 8 (16%) of transfers. Apart from the transient increase in oxygen requirement and PEEP while on transport CPAP (50% of transfers), the main adverse event was hypothermia (temperature < /= 36.5°C at destination hospital) in 33%.

Lower the gestational age and the birth weight, greater was the risk of hypothermia. Stabilisation time and transfer time were negatively correlated with hypothermia.

Conclusions: Careful triaging of referrals led to efficient use of nursing teams in conducting safe CPAP transfers. Greater emphasis placed on temperature control has led to minimising the risk of hypothermia. A new cost-effective method to humidify gases through the CPAP circuit is currently on trial at Embrace.