717

PASSIVE COOLING DURING TRANSPORT OF BABIES WITH HYPOXIC ISCHAEMIC ENCEPHALOPATHY

R. Ranganna, G. Venkatesh, C. Smith

Neonatal Transport, EMBRACE, Yorkshire and Humber Paediatric Transport Service, Sheffield, UK

Background: Perinatal hypoxic ischaemic encephalopathy affects 1-2 per 1000 live births. Therapeutic hypothermia is now a standard treatment shown to reduce the severity of neurological damage in mild to moderate cases. Cooling should be commenced within six hours of birth and the target core temperature is 33-34°C. Currently, the recommended practise is for transfer within Neonatal Networks to a centre with experience of providing therapeutic hypothermia for further management. This requires the provision of passive cooling during transport.

Method: We conducted a retrospective case note review to look at the temperature regulation during transfer of the babies in Yorkshire and Humber region. The temperature data is expressed as an interquartile range (IQ1-IQ3) and was analysed using Microsoft Excel.

Result: In total the Yorkshire and Humber Infant & Paediatric Transport Service transferred nineteen babies to regional cooling centres during April 2010 and November 2010. All the babies were term (>37week gestation). All the babies were passively cooled and in one baby ice packs were used when referred. The median temperature at referral was 35.4°C (34.7-35.7°C), on arrival of the transport team 34.4°C (33.1-36.0°C), on departure 33.4°C (33.0-34.4°C), at receiving unit 33.1°C (32.7-33.6°C). In 2 babies the temperature was unrecordable.The target temperature was achieved in only 47% of cases.

Conclusion: Maintenance of temperature within the target range is challenging during transport. Following the audit there has been increased awareness about monitoring core temperature while cooling babies. As a service we aim to use active cooling method to achieve target temperature.