What is the impact of therapeutic hypothermia in neonates with birth asphyxia in Puducherry, India?

Rojo Joy and colleagues from the Departments of Paediatrics and Biochemistry at the Jawaharlal Institute of Postgraduate Medical Education in Puducherry, India conducted a randomized controlled trial to assess the effect of cooling on oxidative stress and neurological outcomes.

116 infants were randomized and there were no significant differences between the two groups at baseline. One baby dies in the intervention arm and four in the control arm, data were collected on all other infants. Total antioxidant status was significantly increased \((p < 0.001)\) and malondialdehyde was significantly reduced \((p < 0.001)\) in the therapeutic hypothermia group.

Neurological outcome was assessed using the Amiel-Tison examination prior to discharge, so no longer term data are available. However, the initial results were encouraging with a significant reduction \((p < 0.001)\).

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How effective in preventing neonatal deaths is a community health worker home visiting service in Kenya?

Allison Livingston and associates from the Tuscon and Albuquerque in the USA and the School of Public Health in the University of Nairobi, Kenya developed and evaluated a pilot intervention in the Yatta district of eastern Kenya. Community Health Workers had a 2 day training programme to recognize the signs and symptoms of neonatal illness and visited over 700 infants with 3 visits completed for 93 of families. The crude neonatal mortality rate was 7.1 per 1000 live births in this population.

Training was evaluated with a pre- and post-test. The pilot was successful in demonstrating feasibility and both the referral and mortality rates were surprisingly low. The study did not have a control group and so it is difficult to interpret the results but further research should be done.

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Is there a relationship between cord blood 25 hydroxyvitamin D levels and the risk of acute lower respiratory tract infections in early childhood?

Walid Abdel Wahab Mohamed and Mohammed Ali Al-Shehri investigated the relationship between low cord vitamin D levels and subsequent (in the first 2 years of life) bronchiolitis or pneumonia. An association is identified with infants with low cord blood vitamin D levels showing an increased risk of later respiratory infection.

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