

Making birth safer

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There has been remarkable recent progress over the last two decades in understanding, treating and managing babies at birth. Therapeutic hypothermia is now strongly established to significantly improve the outcome of babies suffering acute perinatal brain injury. Further, the new ILCOR guidelines now recommend that babies should be resuscitated starting in air and not 100% O₂ and the FiO₂ then titrated depending on the response. In preterm babies, maternal glucocorticoid treatment before birth dramatically improves survival and reduces systemic complications and there is now evidence from randomized controlled trials that maternal magnesium may reduce the risk of cerebral palsy. However, despite these advances, many babies still die or survive with major disabilities after perinatal brain injury or premature birth. To further improve outcomes of babies after resuscitation, we need new knowledge of how the infant adapts to asphyxia and resuscitation, how routine interventions such as ventilation and exposure to maternal glucocorticoids affect the brain, and what treatments augment protection with hypothermia.