National review of Neonatal Encephalopathy (NE) associated with perinatal asphyxia in NZ

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Objective

To identify areas for quality improvement in maternity and neonatal care to reduce the incidence and severity of neonatal encephalopathy

Methods

Case definition:
All NZ cases of moderate or severe Sarnat stage NE at term after onset of labour in the absence of a recognised acute event with evidence of hypoxia (abnormal or no cord gases and/or Apgar @ 1 min <8) in 2010-2011

Review methods:
Multidisciplinary case review using PMMRC contributory factors and potential avoidability tool.

Findings

KEY ISSUES IDENTIFIED:
- Risk assessment around place of birth and prior to/during labour
- Adherence to referral and clinical guidelines

Conclusion

- More than half of NE following intrapartum hypoxia is potentially avoidable.
- Strategies must be developed to address key issues identified among NE cases in NZ


Need for improved fetal and maternal surveillance in labour:
- maternal observations
- intermittent auscultation
- CTG

Careful neonatal assessment if respiratory symptoms or need for resuscitation, even in the absence of a reported history of asphyxia

Early discussion and transfer to units providing induced cooling

Neonatal resuscitation training for all involved in maternity care

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