NICE Clinical Guidelines and a systematic review on early skin-to-skin care for term infants and low birth weight infants and their mothers

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| | Early skin-to-skin care | Standard Kangaroo care |
|--------------------------|---------------------------|------------------------|
| Term healthy infants | The Cochrane review by | No need for research |
| | Anderson GC | |
| | NICE Postnatal Care | |
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| Low birth weight infants | Our new systematic review | The Cochrane review by |
| or preterm infants | below | Conde-Agudelo A |

Term infants

NICE Clinical Guidelines are national evidence-based guidelines for England and Wales. Recently a guideline on postnatal care for healthy women and their babies has been published, and another guideline on intrapartum care for healthy women and their babies is currently in development. In the Postnatal Care guideline, the Guideline Development Group considered latest scientific evidence on skin-to-skin care and developed a series of positive recommendations on early skin-to-skin care for term healthy infants. In the workshop, the results of the systematic reviews and considerations of the guideline development group will be briefly presented with its recommendations.

Low birth weight infants

Background information

Low birth weight is a significant cause of neonatal mortality and morbidity around the world. A simple, cost~effective intervention for improving health of these babies is skin-to-skin contact, but concerns have been raised about the practice due to lack of concrete scientific evidence. The Cochrane Review of Interventions to prevent hypothermia at birth in preterm and/or low birth weight babies by McCall EM does not necessarily answer this question

Objectives

To assess the effectiveness of skin-to-skin contact started within 48 hours of birth for stable low birth weight and/or preterm babies and their mothers compared to standard neonatal care. Subgroup analysis planned according to developmental status of country of research.

➤ Methods

Search strategy: A comprehensive literature search encompassing all the major electronic databases was carried out; citations obtained were checked for duplication and abstracts of remaining studies assessed for selection. Authors were contacted in case of incomplete information.

Selection criterion: All controlled trials and observational studies comparing maternal and infant outcomes between low birth weight babies starting skin-ta-skin contact within 48 hours of birth and those given conventional newborn care.

Data collection and analysis: Methodological quality was assessed and relevant data extracted for all the outcomes and analysed using RevMan 4.2.5. For dichotomous outcomes, Relative Risk (RR) with 95% confidence limits and for continuous outcomes Mean Difference (MD) with 95% confidence interval was calculated.

> Results

Three studies fulfilled the entire selection criterion. They were randomized controlled trials held in countries with different income status. Two studies did not receive high methodological quality ratings. All outcomes recorded were different from each other or recorded in different manner; hence a meta-analysis could not be conducted.

In one study skin-ta-skin care was shown to be effective in reducing risk of hypothermia, maintaining physiological parameters below a pre-determined range and stabilizing cardia-respiratory status of babies. In another it helped infants spend more time in a state of alert inactivity and less time crying and in drowsy state. No other difference was statistically significant. No adverse outcome was reported.

> Conclusion

There is inconclusive evidence for effectiveness of early initiation of skin-ta-skin contact in stable LBW babies, although some benefits are reported from individual studies. There is need to conduct a high quality multi-centric randomized trial in different settings.