NICE: The National Institute for Health and Clinical Excellence, and its Recent Guidance for Intrapartum Care

The National Institute for Health and Clinical Excellence (NICE) is an independent organization with legal status as a Special Health Authority to the National Health Service (NHS) in England and Wales. Its purpose is to develop guidance regarding quality and cost-effectiveness of clinical practices and medical technologies, and rationale for use within the NHS.

This is carried out through an iterative review process to evaluate the quality of evidence about treatments and technologies in which multiple stakeholders, including consumers and their advocates, can register to participate. The scope of NICE guidance is ambitious; for each topic under review, a suite of documents is produced that includes a full guideline, quick reference guide, resources for consumers and technical documents outlining aspects of the review methodology and suggestions for implementation. These documents are updated on a regular schedule, and are freely available online.

In principle, NICE guidelines are based on systematic reviews of the best available evidence; however, when insufficient evidence exists, recommendations are developed by consensus. There may be controversy among stakeholders because the process of determining whether studies meet inclusion criteria and evaluating their quality is inherently subjective and can significantly impact final recommendations.

In September, 2007, NICE released guidelines for intrapartum care (NICE, 2007). They include general principles for care, and recommendations regarding place of birth, pain relief, genital trauma, rupture of membranes before onset of labor, and recognition and management of delayed labor. A summary of these guidelines that indicates which recommendations are based primarily on consensus has been published (Kenyon, Ullman, Mori & Whittle, 2007).

Final recommendations come forward in the intrapartum care documents based on differing levels of evidence, and it can be challenging to know whether there is sufficient rationale to base policy and practice decisions on the guidelines. Earlier NICE guidelines included information about methods to assign levels to the evidence and clarified the quality of support that was available for specific recommendations, but the latest guidelines have omitted this feature. Overall, there is much that is positive about NICE guidance, with some concerns in regard to the consistency and transparency of the level of evidence supporting these recommendations.

REFERENCES


From Cochrane Database of Systematic Reviews (CDSR), Issue 1, 2008

New Systematic Reviews

- Abstinence-plus programs for HIV infection prevention in high-income countries
- Alendronate for the primary and secondary prevention of osteoporotic fractures in post-menopausal women
Updated Systematic Reviews

- Intracervical prostaglandins for induction of labour
- Long versus short course treatment with Metformin and Clomiphene Citrate for ovulation induction in women with PCOS
- Oral contraceptives containing drospirenone for premenstrual syndrome
- Probiotics for prevention of necrotizing enterocolitis in preterm infants
- Prophylactic oral betamimetics for preventing preterm labour in singleton pregnancies
- Specialist breast care nurses for supportive care of women with breast cancer
- Techniques for cesarean section
- Third trimester antiviral prophylaxis for preventing maternal genital herpes simplex virus (HSV) recurrences and neonatal infection

Evidence-Based Reviews from Other Sources


Meta-analysis of individual patient data from 7 randomized trials examined effects of cerclage on maternal and neonatal outcomes. Data came from 2091 women at risk for preterm birth or loss based on cervical length or obstetric history. The primary outcome was pregnancy loss or neonatal death before hospital discharge. Secondary outcomes included neonatal and maternal morbidity. Women with singleton pregnancies who underwent cerclage had a 19% decrease in odds of pregnancy loss.
loss or neonatal death that was not statistically significant. In multiple gestations, cerclage was associated with significantly higher odds of pregnancy loss or neonatal death than no cerclage, even though the sample size was small. Increased maternal fever, but no significant difference in other secondary outcomes, was noted in the cerclage group. No interaction was found between cerclage and cervical length or obstetric history.

Comment: The ultimate goal of cerclage is improved outcomes for the fetus or newborn, for which gestational age is not always a proxy. This study suggests harm from cerclage in multiple gestations and no significant benefit on any variable studied, however the non-significant reduction in pregnancy loss in high-risk singleton pregnancies could signify a lack of statistical power. Possible longer-term adverse effects of the intervention were not assessed.


A systematic review of all published studies reporting effects of swaddling was conducted. The 78 included studies were of varying designs and for most the quality of evidence was not described. Benefits were found in sleep continuity and duration, temperature regulation and soothing after painful stimulus. Benefits specific to preterm infants and those with cerebral lesions were found. Also noted in association with swaddling was increased risk for hip dysplasia for infants swaddled with legs adducted and extended, sudden infant death syndrome for swaddled infants placed in a prone position, poor weight gain for infants swaddled and separated from their mothers at birth, and respiratory infection for infants swaddled too tightly.

Comment: This review of a common practice is broad but it is difficult to evaluate the quality of evidence included. Further confusion arises due to ambiguity in the use of acronyms for randomized controlled trials (RCTs) and observational studies meeting criteria of the Cochrane Registry of Controlled Trials, denoted as “Cochrane RCTs”. Better quality evidence is needed but swaddling, when practiced correctly, appears to carry potential benefits.


Masi and colleagues report that despite similar mammography rates for white and African American women since 1993, African American women of all ages are still more likely to die from breast cancer than white women. Their systematic review of controlled studies focusing on minority women and published from 1986 to 2005 identified as most effective patient-targeted interventions that addressed financial and logistical barriers, chart-based physician reminders, and case management for follow-up treatment. Sohl and Moyer reported a 42% increase in the aggregate odds of adherence to mammography associated with tailored interventions in a pooled analysis of 28 studies conducted from 1997 to 2005. Interestingly, they found interventions that attempted to tailor for ethnicity decreased adherence to screening compared to those with no ethnicity component.

Comment: These studies highlight the complexity of factors contributing to effectiveness of interventions in breast cancer screening, diagnosis and treatment across diverse patient groups. More research is needed to discern and eliminate causes of persistent disparity in success of screening, diagnosis and treatment for breast cancer. These studies suggest no single “one size fits all” intervention is likely to be effective across all groups, but that multi-faceted interventions and strategies tailored to remove identified barriers improve screening rates and adherence to treatment.

Recent Evidence-Based Reviews

• Dunfield, L., & Severn, M. (2007). Effectiveness of magnetic resonance imaging (MRI) screening for women at high risk of breast cancer [Technology report number 93]. Ottawa: Canadian Agency for Drugs and Technologies in Health. Available without charge at http://www.cadth.ca


