THE NATIONAL INSTITUTE FOR HEALTH AND CLINICAL EXCELLENCE (NICE) 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 the quality and cost effectiveness of clinical practices and medical technologies, and the rationale for their 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. 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.

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 postmenopausal women
- 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 drosperrinone 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

Updated Systematic Reviews

- Antioxidants for preventing pre-eclampsia
- Biophysical profile for fetal assessment in high risk pregnancies
Cranberries for preventing urinary tract infections
Cyclical progestogens for heavy menstrual bleeding
Diuretics for respiratory distress in preterm infants
Hormone replacement therapy for cognitive function in postmenopausal women
Interventions for relieving the pain and discomfort of screening mammography
Interventions to prevent hypothermia at birth in preterm and/or low birthweight infants
Restricted versus liberal water intake for preventing morbidity and mortality in preterm infants
Skin patch and vaginal ring versus combined oral contraceptives for contraception
Support for mothers, fathers and families after perinatal death
Transfer of preterm infants from incubator to open cot at lower versus higher body weight

Cochrane Reviews are available by subscription to The Cochrane Library, and review abstracts are available without charge. See http://www.thecochranelibrary.com

FROM DATABASE OF ABSTRACTS OF REVIEWS OF EFFECTS (DARE)

Recent Abstract Entries Assessing Quality of Systematic Reviews
- Cervical cancer and use of hormonal contraceptives: A systematic review
- Effectiveness of primary conservative management for infants with obstetric brachial plexus palsy
- Evidence-based strategies for reducing cesarean section rates: A meta-analysis
- Follow-up care of patients treated for breast cancer: A structured review
- Late versus early clamping of the umbilical cord in full-term neonates: Systematic review and meta-analysis of controlled trials
- Maternal position during the first stage of labor: A systematic review
- Mortality associated with hormone replacement therapy in younger and older women: A meta-analysis
- Paroxetine and congenital malformations: Meta-analysis and consideration of potential confounding factors
- Role of sonography in the diagnosis of axillary lymph node metastases in breast cancer: A systematic review
- Treating depression during pregnancy and the postpartum: A preliminary meta-analysis
- Trifolium pretense isoflavones in the treatment of menopausal hot flushes: A systematic review and meta-analysis
- Vaginal vault smears after hysterectomy for reasons other than malignancy: A systematic review of the literature

DARE abstracts are available without charge from http://www.york.ac.uk/inst/crd/crddatabases.htm#DARE

EVIDENCE-BASED REVIEWS FROM OTHER SOURCES


This meta-analysis of individual patient data from 7 randomized trials examined the 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 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 the 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 an 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.
Further confusion arises because of the 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.

**Featured reviews:**

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

**Recent Evidence-Based Reviews**
- Dunfield L, Severn M. 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 from: www.cadth.ca