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[Intervention Review]

Interventions for preventing mastitis after childbirth

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ABSTRACT

Background

Despite the health benefits of breastfeeding, initiation and duration rates continue to fall short of international guidelines. Many factors influence a woman's decision to wean; the main reason cited for weaning is associated with lactation complications, such as mastitis.

Objectives

To assess the effects of preventive strategies for mastitis and the subsequent effect on breastfeeding duration.

Search methods

We searched the Cochrane Pregnancy and Childbirth Group's Trials Register (November 2009), CENTRAL (*The Cochrane Library* 2009, Issue 4), MEDLINE (1950 to November 2009), EMBASE (1974 to November 2009), CINAHL (1981 to November 2009), MIDIRS (1971 to November 2009), IPA (1970 to November 2009), AMED (1985 to November 2009) and LILACS (1982 to November 2009).

Selection criteria

We included randomised controlled trials of interventions for preventing mastitis in postpartum breastfeeding women.

Data collection and analysis

We independently identified relevant studies and assessed the trial quality. We contacted trial authors for missing data and information as appropriate.

Main results

We included five trials (involving 960 women). In three trials of 471 women, we found no significant differences in the incidence of mastitis between use of antibiotics and no antibiotics (risk ratio (RR) 0.43; 95% confidence interval (CI) 0.11 to 1.61; or in one trial of 99 women comparing two doses (RR 0.38; 95% CI 0.02 to 9.18). We found no significant differences for mastitis in three trials of specialist breastfeeding education with usual care (one trial); anti-secretory factor cereal (one trial); and mupirocin, fusidic acid ointment or breastfeeding advice (one trial).

Generally we found no differences in any of the trials for breastfeeding initiation or duration; or symptoms of mastitis.

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Authors' conclusions

There was insufficient evidence to show effectiveness of any of the interventions, including breastfeeding education, pharmacological treatments and alternative therapies, regarding the occurrence of mastitis or breastfeeding exclusivity and duration. While studies reported the incidence of mastitis, they all used different interventions. Caution needs to be applied when considering the findings of this review as the conclusion is based on studies, often with small sample sizes. An urgent need for further adequately powered research is needed into this area to conclusively determine the effectiveness of these interventions.

PLAIN LANGUAGE SUMMARY

Interventions for the prevention of mastitis following childbirth

Healthcare authorities and the World Health Organization recommend that newborn infants should exclusively be given breast milk until they are six months of age. Breastfeeding provides health benefits for the infant, including improved nutrition and protection against illnesses such as gastroenteritis, respiratory and ear infections, urinary tract infections, allergies and diabetes mellitus. Breastfeeding also saves on costs and has benefits for the mother. Mastitis is a significant complication of lactation and may stop some mothers from breastfeeding. The nipple becomes sore and the breast tender and swollen. If the nipple cracks, the breast can become infected and the mother may experience flu-like symptoms. Poor breast attachment and inadequate emptying of milk from the breast when feeding may contribute to developing mastitis. It is important to investigate preventive measures in order to maintain and increase breastfeeding exclusivity and duration.

This review found five randomised controlled trials that involved a total of 960 women. They looked at a variety of preventive interventions including breastfeeding education, taking antibiotic medication, topical ointments and anti-secretory factor cereal. None of the therapies made any difference in reducing breast infections or the length of breastfeeding exclusivity and duration with this limited evidence. Generally studies were of low quality, with limited findings highlighting the need for better quality research in this area.