



Antibiotics effective for preventing infection at caesarean section

Clinical question

How effective are the different classes of antibiotics given as prophylaxis for infection prior to caesarean section (CS)?

Bottom line

Both cephalosporins and penicillins represent good choices for prophylaxis for maternal infections following CS, although the impact on post-discharge infections and on the infant are unknown, as is the impact on bacterial resistance. The effects were similar, whether the CS was an elective or emergency procedure. Both classes of antibiotic had similar adverse effects (allergic reactions, nausea, vomiting, diarrhoea, skin rashes). More costly extended-spectrum penicillins, second or third generation cephalosporins and combination regimens were not demonstrated to be more effective, but there were few data upon which to make a clear judgement.

Caveat

There was a lack of good quality data, and important outcomes often included only small numbers of women. Many of the studies were conducted in the 1980s and 1990s. None of the studies assessed infections that arose when the women were discharged home, and none looked at outcomes in the babies. No consideration was given to antibiotics compatible with breastfeeding, and the review was unable to assess what impact, if any, the use of different types of antibiotics might have had on bacterial resistance.

Context

CS increases the risk of post-partum infection (infections of the wound or abdominal fascia, the urinary tract or pelvic organs, as well as thrombophlebitis and, rarely, septicaemia), and prophylactic antibiotics have been shown to reduce the incidence of this.

Cochrane Systematic Review

Alfirevic Z, Gyte GML, Dou L et. Different classes of antibiotics given to women routinely for preventing infection at caesarean section. Cochrane Reviews, 2010, Issue 10. Article No. CD008726. DOI: 10.1002/14651858.CD008726.

This review contains 25 studies involving 6367 participants.

PEARLS No. 302, March 2011, written by Brian R McAvoy

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