

Epidural analgesia associated with low-dose oxytocin augmentation increases cesarean births: A critical look at the external validity of randomized trials

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Objective

Randomized controlled trials suggest epidural analgesia (EA) does not increase the frequency of cesarean births compared with opioid analgesia. We analyzed trials comparing EA with opioid analgesia to determine their external validity in contemporary North American practice.

Study design

Randomized controlled trials comparing EA with opioid analgesia were identified from the Cochrane database and Medline and included if they reported labor outcomes and management protocols. Labor management was then compared with current obstetric practice determined from surveys of North American teaching maternity units and clinical practice guidelines.

Results

Of 19 trials identified, 8 were included. Seven trials used Active Management of Labor protocols that used high-dose oxytocin; each demonstrated no epidural-related increase in cesarean births. One trial that used low-dose oxytocin demonstrated a marked increase in cesarean births. Most large North American obstetric units use low-dose oxytocin.

Conclusion

Randomized trials showing no effect of EA on cesarean section (CS) rate lack external validity in much of North American practice. The limited data available suggest EA and low-dose oxytocin used together increase the CS rate. Early detection of dystocia and high-dose oxytocin augmentation should be considered for women receiving EA; those delivering in low-dose oxytocin settings should be advised of a probable increase in the likelihood of CS.

Key words: Epidural analgesia; External validity; Oxytocin; Cesarean section; Randomized trials

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