

THE IMPACT OF DELIVERY MODE ON POSTPARTUM STRESS URINARY INCONTINENCE IN PRIMIPARAS: A META-ANALYSIS

Hypothesis / aims of study

The impact of delivery mode on the development of urinary incontinence (UI) has been much debated. The primary objective of this study was to evaluate the affection of vaginal birth and cesarean section to the prevalence of postpartum stress urinary incontinence (SUI).

Study design, materials and methods

PubMed (2000 to 2011) database was searched (May 2011) for reports specifying postpartum prevalence or incidence of stress urinary incontinence by mode of birth. Relevant prospective cohort studies were selected and analyzed by two independent authors. This study only compares the incidence of postpartum stress urinary incontinence in primiparas. Meta-analysis was performed with random effects model using Stata 8.

Results

There were twelve prospective studies included in the meta-analysis. Cesarean section reduced the risk of postpartum stress urinary incontinence from 30.1% to 11.7% (OR = 0.36[0.29, 0.45]) compared with vaginal delivery. Differences persisted after exclusion of instrumental delivery or when grouped according to follow-up period. The difference between elective cesarean section and emergency cesarean section was 9.7% versus 16.1% for postpartum stress urinary incontinence (OR = 0.43[0.23, 0.82]), but this difference disappeared with at least 6 months of follow-up.

Interpretation of results

The occurrence of postpartum stress urinary incontinence is reduced significantly with cesarean section compared to vaginal delivery, but instrumental delivery does not appear to exert a significant influence on the development of postpartum stress urinary incontinence.

Concluding message

To reduce the risk of postpartum stress urinary incontinence must be considered in the context of associated maternal and newborn morbidity and mortality.

Disclosures

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