The Use of Episiotomy in Obstetrical Care: A Systematic Review

Structured Abstract

Context: In the United States, use of episiotomy varies from less than 10 percent to more than 75 percent of vaginal births. Overall, 30 to 35 percent of vaginal births include episiotomy. Routine episiotomy may not yield maternal benefits traditionally ascribed to it.

Objectives: We addressed five key questions (KQs):

- 1. Does the practice of liberal or routine episiotomy, compared to more selective use of episiotomy, influence maternal postpartum outcomes?
- 2. Does episiotomy incision type (i.e., midline or mediolateral), influence maternal postpartum outcomes?
- 3. Does the repair of the perineal defect (i.e., suture type and repair approach) influence maternal postpartum outcomes?
- 4. Does episiotomy have a long-term influence on urinary incontinence, fecal incontinence, or pelvic floor defects?
- 5. Does episiotomy or incision type, or both, influence future sexual function?

Data Sources: We searched MEDLINE®, Cochrane Library, and CINAHL® and did hand-searches, and consulted with experts.

Study Selection: We excluded studies (1) not about outcomes of vaginal birth; (2) in languages other than English; (3) not pertinent to the key questions; (4) with < 40 subjects; and (5) not representing original research. KQs1, 2, and 3 were limited to randomized controlled trials. KQs4 and 5 included nonrandomized prospective cohorts.

Data Extraction: We entered data into pretested abstraction forms; did a second review for accuracy, completeness, and consistency; and graded quality of studies.

Data Synthesis: Literature searches yielded 986 articles; 659 were excluded after abstract review. Of the remaining 327, we included 45 articles.

Conclusions: Fair to good evidence suggests immediate maternal outcomes from routine episiotomy are not better than those from restrictive use; instead, outcomes are worse because some proportion of women who would have had lesser injury instead had a surgical incision. Evidence is insufficient to provide guidance on choice of midline or mediolateral episiotomy when indicated. For perineal injury requiring suturing, fair to good evidence suggests leaving superficial vaginal and perineal skin unsutured is potentially preferable. If used for skin approximation, a continuous, subcuticular repair is superior to an interrupted, transcutaneous method. Evidence is consistent and clear that absorbable suture is preferred and that polyglycolic acid suture is associated with less morbidity than gut and chromic gut suture. Evidence is insufficient to determine whether novel materials, such as tissue adhesive, offer benefits. Evidence regarding long-term sequelae is fair to poor; assessment of pelvic floor dysfunction was not

conducted in the age groups of greatest relevance. Limited data show that episiotomy does not prevent fecal and urinary incontinence, pelvic floor relaxation, or impaired sexual function, within months to years from childbirth.