

Original research article

A Prospective Study of Restricted Use of Episiotomy in Primigravida Patients

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Abstract

Aim: There is extensive disagreement about the necessity and benefits of routine episiotomy for all. The American Congress of Obstetricians and Gynecologists Committee on Practice Bulletins, 2006 based on good scientific evidence recommends restricted use of episiotomy to be preferred, yet its restricted use is not being practiced. Keeping these in mind, the study was done with the aim to assess the effects of restrictive use of episiotomy during vaginal birth.

Materials and methods: This was a prospective study. Single- ton primigravida term vaginal deliveries over 18 months(June 2020-Dec2021) were included. Under the policy of restricted use of episiotomy, great restraint was observed in giving an episiotomy. Mediolateral episiotomy was given in women where expected baby weight >3 kg or perineal tear was anticipated, and in cases of instrumental deliveries. Perineal tears, postpartum status, and satisfaction level of women were compared between patients with or without episiotomy. Data so obtained were analyzed

Results: About 29.8% women delivered with episiotomy, 65.5% had intact perineum; 5.67% women had first-degree perineal tear and only 1.42% women had second-degree perineal tear using a policy of restricted use of episiotomy. None of the women had third- and fourth-degree perineal tear. Patients delivered without episiotomy were more comfortable in terms of less perineal pain, early evacuation of bladder, and ambulation

Conclusion: With the restricted use of episiotomy using precise clinical judgment, the unnecessary episiotomies could be avoided, giving better care and patient satisfaction with minimum maternal morbidity

Clinical significance: The policy of restricted use of episiotomy would result in considerable reduction in maternal morbidity, decreased hospital stay and overall cost, and good patient satisfaction level

Keywords: Episiotomy, Interventional study, Perineal pain, Perineal tears, Restricted use

Introduction

Episiotomy is one of the most commonly performed surgical procedures during delivery, yet there is extensive disagreement about the necessity and benefits of this procedure. The lack of consensus about routine or restricted use of episiotomy is reflected in the wide variation in the episiotomy rates being reported in different studies.¹ In the United States, changing trends in obstetrical practice influenced the decision to perform an episiotomy and resulted in a decreasing prevalence, from 60.9% in 1979² to 12% in 2012,³ though there was little decline of its use in Nigeria (45%)⁴ and France (68% in nulliparae, 31% among multiparae).⁵ To evaluate the trends in a tertiary care center in Kalaburagi, records of 1,000 primigravida with

singleton full-term vaginal deliveries were analyzed retrospectively, which showed that almost all of them were delivered vaginally with liberal use of episiotomy. The American Congress of Obstetricians and Gynecologists Committee on Practice Bulletins, 2006 based on good scientific evidence recommends restricted use of episiotomy to be preferred (only for maternal or fetal indications, such as avoiding severe maternal lacerations or facilitating or expediting difficult deliveries to its routine or liberal use).⁶ Keeping these in mind, the study was done with the aim to assess the effects of restrictive use of episiotomy during vaginal birth.

MATERIALS AND METHODS

This was a prospective study, designed to analyze the maternal outcome of restricted use of episiotomy in primigravida with singleton live, term pregnancy vertex presentation in age group of 18 to 30 years, over a period of 18 months (June 2020-Dec 2021). All women were of Indian origin and there were no ethnic difference among the cases. Exclusion criteria applied were preterm pregnancy, malpresentations, multiple gestation, intrauterine fetal death, medical disorders, and fetal complications. Written informed consent was taken of all participants. A detailed history was elicited. Women were delivered without episiotomy, under the policy of restricted use of episiotomy. Mediolateral episiotomy was given only in women with expected baby weight more than 3 kg or with unyielding perineum to prevent serious perineal tears or when instrumental delivery was indicated. Details of each delivery were recorded in terms of number and type of perineal tear, paraurethral tear, perineal pain after 6 and 24 hours, ambulation time after delivery, and satisfaction level. Perineal pain using visual analog scale (VAS) (0 = no pain, 10 = very severe pain) and satisfaction level were assessed on a scale of 1 to 10 (0 = not satisfied, 10 = fully satisfied). Data collected were analyzed by appropriate statistical test Chi-square value and associated p values were calculated assuming significance at the $p < 0.05$ levels.

RESULTS

Total deliveries analyzed over 3 months were 1,200, of which 29.5% ($n = 354$) were delivered with episiotomy. About 49.15% of the cases underwent episiotomy for anticipated perineal tears, 44.06% for estimated baby weight >3 kg, and 6.77% for need for instrumental delivery (Table 1). About 65.5% of total patients had intact perineum. First- and second-degree perineal tears were present in 5.67 and 1.42% respectively, among the patients whose labor was managed without episiotomy in comparison to patients delivered with episiotomy who had first-degree perineal tear in 3.38% cases and no second-degree perineal tear. There was no statistical increase in tears in the restricted group as compared with the episiotomy group ($p = 0.488$). No patient had third- or fourth-degree perineal tear in any group. In both groups, around 10% women had anterior perineal tears; difference between the two was not statistically significant ($p = 0.641$) (Table 2). Mean VAS score for perineal pain after 6 and 24 hours was more in women who were delivered with episiotomy than without (5.94 vs 2.42). Mean time for evacuation of bladder was 2.34 hours without episiotomy as compared with women who had episiotomy (4.79 hours). Postpartum ambulation was achieved early in women with no episiotomy (mean time of ambulation 3.16 hours) than those with episiotomy (5.36 hours). Satisfaction level was more in women who did not have episiotomy

Table 1: Indications of episiotomy

| <i>Indications of episiotomy</i> | <i>No. (354)</i> | <i>%</i> |
|----------------------------------|------------------|----------|
| Anticipated perineal tear | 174 | 49.15 |
| Expected baby weight >3 kg | 156 | 44.06 |
| Need for instrumental delivery | 24 | 6.77 |

Table 2: Perineal tears in the two groups

| | | <i>Normal delivery</i> (n = 846) | <i>Normal delivery with episiotomy</i> (n = 354) | <i>Total</i> (n = 1,200) | |
|--------------|-----------------------|-------------------------------------|---|-----------------------------|----------------|
| <i>Tears</i> | <i>Vaginal Mucosa</i> | <i>No. (%)</i> | <i>No. (%)</i> | <i>No. (%)</i> | <i>p-value</i> |
| Anterior | Intact | 756 (89.36) | 318 (89.84) | 1074 (89.5) | 0.641 |
| | Tear present | 90 (10.64) | 36 (10.16) | 126 (10.5) | |
| Posterior | First degree | 48 (5.67) | 12 (3.38) | 60 (9.05) | 0.488 |
| | Second degree | 12 (1.42) | 0 | 12 (1.42) | |
| | Third/fourth degree | – | – | – | |

Table 3: Postpartum status of women after restricted use of episiotomy

| <i>Variables</i> | | <i>Normal delivery without episiotomy</i> | <i>Normal delivery with episiotomy</i> |
|---|----------------|---|--|
| Perineal pain (mean VAS score) | After 6 hours | 4.52 | 9.32 |
| | After 24 hours | 2.42 | 5.94 |
| Mean time of evacuation of bladder (in hours) | | 2.34 | 4.79 |
| Mean time of ambulation (in hours) | | 3.16 | 5.36 |
| Satisfaction level | | 9.54 | 4.92 |

DISCUSSION

Episiotomy had been routinely used to facilitate delivery. Maternal benefits attributed to the use of episiotomy include a reduced risk of perineal trauma, subsequent pelvic floor dysfunction, prolapse, urinary incontinence, fecal incontinence, and sexual dysfunction. Potential benefits to the fetus were thought to include a shortened second stage of labor resulting from more rapid vaginal delivery.⁶ Though most of our findings were similar to the study of other authors, in our study, we did not find an increased incidence of anterior perineal tears in restrictive group. In a Cochrane systemic review by Carroli and Mignini,⁷ rate of episiotomy was 75.15% in routine and 28.40% in restrictive episiotomy group. Compared with routine use, restrictive episiotomy resulted in less severe perineal trauma, less suturing, and fewer healing complications. Restricted episiotomy was associated with more anterior perineal trauma. There was no difference in severe vaginal or perineal trauma, dyspareunia, urinary incontinence, or several pain measures. In a study in Spain, it was observed that the rate of episiotomies performed during singleton vaginal term deliveries had decreased to around 25% and severe perineal trauma in all births were below 1% with this restricted use.⁸ Hartmann et al⁹ also observed that immediate maternal outcomes of routine episiotomy including severity of perineal laceration, pain, and pain medication use were not better than those with restrictive use but it increased the need for stitching, the healing period, likelihood of bowel incontinence, and pain with intercourse. Trinh et al¹⁰ observed the obstetricians and midwives in Vietnam to have certain beliefs, entrenched practices, and attitudes about the reasons and consequences of performing an episiotomy that contradict current research evidence and that changing their episiotomy practice in Vietnam would not be easy. However, patience and small incremental changes would be the best approach in achieving optimal outcomes for mothers and babies

LIMITATION

The study was done in a tertiary care hospital. There is a need to adopt and spread the message of restricted use of episiotomy all around the state

CONCLUSION

From these observations, we can conclude that with the restricted use of episiotomy using precise clinical judgement, the unnecessary episiotomies could be avoided, giving better care and patient satisfaction with minimum maternal morbidity. Hence, it should be adopted and advocated for all vaginal deliveries

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