

## A study of the morbidity associated with episiotomy

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### Abstract

**Objective:** To review the indications and the morbidity associated with episiotomy.

**Methods:** Study was carried out in 450 consecutive women who had episiotomies at delivery during the period from 01-03-2002 to 01-09-2002 at University Unit, Colombo South Teaching Hospital. Women were interviewed within 24 hours of delivery and 6 weeks later. Data were collected using an interviewer administered questionnaire.

**Results:** Out of a total of 876 mothers 51.4% had episiotomies at delivery and in 87% the indication was prevention of a possible perineal laceration. In 8% of women episiotomy was sutured later than 30 minutes from the time of performing. Although 10 ml of 1% lignocaine was infiltrated before performing and suturing the episiotomy, 80% of women complained of moderate to severe pain while performing the incision and 73% complained of moderate to severe pain during suturing. When seen six weeks later, 5% of patients complained of perineal pain and only 0.4% had dyspareunia.

**Conclusion:** Although episiotomy is generally considered to be a harmless procedure it causes moderate to severe pain in a majority of women. Adequate local analgesia, use of less-reactive suture material, emphasis on immediate suturing and post-partum analgesics may contribute to reduce the pain suffered by women following episiotomy.

### Introduction

Episiotomy is the most commonly performed operative procedure in women (1). It is an incision

in the perineum which enlarges the introitus and is used primarily to avoid perineal tears, and also at times, to expedite delivery. Many studies have questioned the benefit of routine episiotomy in primigravidae (2): This study was performed to assess the indications and morbidity associated with episiotomy.

### Methods

A prospective observational study was conducted using the study population of all the women who had an episiotomy during delivery from 01-03-2002 to 01-09-2002 at the University Unit, Colombo South Teaching Hospital, Kalubowila. The study sample consisted of 450 consecutive mothers, who had an episiotomy performed at delivery during the study period. In all subjects perineum was infiltrated with 10ml of 1% lignocaine before episiotomy and when suturing was performed. All episiotomies were sutured using 1/0 catgut threaded on a needle. Vaginal mucosa was sutured with a continuous layer of sutures starting from the apex. Perineal muscle was sutured with interrupted sutures and skin was sutured with mattress stitches. No routine analgesics were given after suturing. The women were interviewed initially 24 hours after delivery and subsequently 6 weeks post partum. Pain was assessed using a visual analogue scale. The data were collected using an interviewer administered questionnaire.

### Results

A total of 876 women delivered during this period and 51.4% had episiotomies. Out of the total of 450 mothers 232 (51.6%) were primiparus and 218 (48.4%) were multiparus. Out of the 450

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women 172 (38.2%) had experienced previous episiotomy, 423 (94%) had term vaginal deliveries and 27 (6.0%) had preterm vaginal deliveries. The mean age of the sample was 27.2 years (SD-5.87) and 44 (9.8%) mothers were below 20 years, 273 (60.7%) were between 20 to 29 years, 121 (26.9%) were between 30 to 39 years and 12 (2.7%) were over 40 years of age. Indications for episiotomy are shown in Table 1.

In all women a medio-lateral episiotomy was performed as this was the policy of this obstetric unit. Time taken to suture the episiotomy is shown in Table 2.

Discomfort experienced by women while performing the episiotomy and during suturing are shown in Table 3.

Post-partum assessment was done 6 weeks later and Table 4 shows the complications seen at that time.

Table 5 shows the complications seen 6 weeks later in women in whom the episiotomy was sutured within 30 minutes and in whom the episiotomy was sutured after a delay of more than 30 minutes.

**Table 1. Indications for episiotomy**

Indication	No. of women (n=450)	%
To prevent perineal laceration	391	86.9
Instrumental Delivery		
Forceps	16	3.6
Vacuum	12	2.7
To expedite second stage	23	5.1
Fetal conditions	8	1.8

**Table 2. Time taken to suture the episiotomy**

Time taken to suture episiotomy	No. of women (n=450)	%
Within 15 minutes	306	68.0
Between 15 to 30 minutes	106	23.6
> 30 minutes	38	8.4

**Table 3. Discomfort experienced while performing and suturing the episiotomy**

Discomfort (assessed by patient)	During incision (n = 450)	%	During suturing (n = 450)	%
Mild (only a discomfort but no pain)	89	19.9	123	27.3
Moderate (bearable)	285	63.4	301	66.9
Severe (unbearable)	76	16.9	26	5.7

**Table 4. Complications seen 6 weeks post partum**

Complication	No. of women (n=450)	%
Infected episiotomy	5	1.1
Post partum perineal pain	21	4.7
Wound dehiscence	8	1.8
Excessive granulation tissue	1	0.2
Dyspareunia	2	0.4

**Table 5. Complications within 6 weeks post partum in relation to time taken to suture the episiotomy**

Complications within 6 weeks post partum	Time taken to suture the episiotomy		P-value
	< 30 min. (n = 412)	> 30 min. (n = 38)	
Infected episiotomy	3	2	0.081
Post partum perineal pain	17	4	0.165
Wound dehiscence	6	2	0.290
Excessive granulation tissue	1	0	1.000
Dyspareunia	1	1	0.399

Differences not statistically significant.

## Discussion

Although it is commonly considered that performing an episiotomy is a harmless procedure it can lead to an increase in maternal blood loss, increase the average depth of posterior perineal injury, risk of improper wound healing, and significant amount of pain in the first few postpartum days (2). As shown in this study women experienced considerable amount of discomfort during performing and suturing the episiotomy. Of the 450 mothers 80% experienced moderate to severe pain during episiotomy and 73% while suturing the episiotomy inspite of perineal infiltration with lignocaine in all women. Only 5% complained of post-partum perineal pain when seen 6 weeks later. Although certain studies have shown that medio-lateral episiotomy can cause more pain and impaired wound healing when compared to median episiotomy (3), the policy of the Obstetric Unit was to perform medio-lateral episiotomies, as extension to third degree perineal tear was less likely in this type. Catgut was used for suturing the episiotomy as this was the material available for suturing in government hospitals. It has been shown in other studies that use of less-reactive suture material such as Polyglycolic acid (*Vicryl-Ethicon*) sutures can reduce the pain and risk of infection, and lead to good wound healing (4). Despite the fact that this study was done in a well staffed university unit in a Teaching Hospital, where a separate house officer was assigned to the labour room on a rostered basis, in 8% of women the suturing of the episiotomy was delayed beyond 30 minutes. Unusually by heavy work load on admission days and lack of supervision during night time may have contributed towards this. The situation in Provincial and Base hospitals can be worse. When assessed 6 weeks later there was no significant difference in complications in women where the episiotomy was sutured within 30 minutes of performing and in women where the delay was more than 30 minutes.

In 87% of women the indication for an episiotomy was to prevent perineal lacerations. In this study all episiotomies were sutured using interrupted

skin sutures. Other studies have shown that continuous repair techniques are better than interrupted suture methods in terms of postpartum pain (5). Training doctors to suture episiotomies using continuous suture technique may help in this regard. A previous study has shown that episiotomy is associated with a decrease in perineal lacerations of first or second degree but a four-fold increase in the incidence of third degree lacerations (6). Two other similar studies have shown that episiotomy can prevent anterior perineal lacerations but fail to prevent perineal damage and its sequelae (2) and that third degree lacerations were not significantly more frequent in deliveries without episiotomy (7). In our study we did not have any women where the episiotomy was extended into a third degree perineal laceration.

When assessed 6 weeks post partum only 0.4% complained of dyspareunia. This figure is very low when compared to 50% and 30% reported in various other studies (8,9). Under reporting of this complication by Sri Lankan women due to shyness may be a possible explanation.

Proper justification of performing episiotomies, adequate local infiltration before performing and during suturing, availability of less-reactive suture material, emphasis on immediate suturing and prescription of analgesics during the post-partum period may contribute towards reducing discomfort suffered by women due to episiotomy.

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