

A Study of Necessity of Episiotomy in Primigravida

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Abstract

This prospective study has been carried out in Sulaimani Maternity Teaching Hospital, from October 2006 to April 2007 to evaluate the outcome of those primigravida women delivered vaginally without epiotomy who had not undergone episiotomy.

Purposive sample of (152) low risk primigravida women in the labour ward during 2nd stage of labour has been selected to collect data properly. It should be noted that previous perineal operation, malposition, instrumental delivery, premature babies, fetal distress, pelvic deformities, induction of labour , short or rigid perineum, medical problems (like hypertension, diabetes, and heart disease...ect), and have been excluded.

Questionnaire has been utilized as study institute, observations, checking & follow up for 24 hours, 1 week, 6 weeks have been used to achieve the main goals.

Through this study it was found that 34.9% of cases remain with intact perineum, 42.8% of cases had 1st degree p. tear, 22.4% of cases had 2nd degree p. tears, and only 83 cases (54.6%) needed suturing (49 cases with 1st degree tears & 34 cases with 2nd degree tears). It was noted also that complications in 1s 24 hours & after 1 week was less common in patients who had intact perineum.

On the bases of this study, we recommend that episiotomy should be restricted to specific maternal or fetal conditions & routine use of episiotomy should be abandoned.

Keywords: Episiotomy, Primigravida

Introduction:

Episiotomy, one of the most common surgical procedures, was introduced in clinical practice in the eighteenth century without having strong scientific evidence of its benefits. The use of episiotomy was favored by the shift from home to hospital deliveries and the adoption of a delivery position on the back imposed by doctors and midwives. [1]

As far back as 1742, a report suggested a surgical opening of the perineum in difficult deliveries for the prevention of severe perineal tears. Further more, it was claimed that the liberal use of episiotomy implied a better future

sexual function and a reduction of urine and fecal problems as a result of the prevention of muscle relaxation. [2, 3]

In the early 1970 it was often advocated that there were two reasons for episiotomy: one was a primigravida and the other a previous episiotomy. In other words every vaginal delivery should be accompanied by episiotomy. [4]

Figures about the word wide use of episiotomy are not well known. In the United States its use is estimated at about 62.5% of deliveries; meanwhile in the Europe these figures appear to be around 30% except for a

rate 56% in Denmark .They estimate a higher use in Latin America, and from a small survey in Argentina episiotomy was seen as a routine intervention in all nulliparous & primiparous deliveries.[1]

Although there are no specific statistics and information in Kurdistan region, it has, more or less, seems to be a routine procedure in primigravida.

Medline episiotomy is more widely used in North America, whereas Mediolateral episiotomy is used in Europe and Latin America. [5] In our country we use mediolateral episiotomy.

Methodology

The aim of this study is to evaluate the outcome of primigravida women in whom episiotomy had not been done, prospective study conducted on one hundred fifty two full term, singleton primigravida women in labour ward in Sulaimani Maternity Teaching Hospital from October 2006 to April 2007.

Inclusion criteria:

1. Avarage size baby by clinical assessment.
2. Presented by occipitoanterior position.
3. Elastic perineum and good pelvic outlet.
4. Cooperative patient with good effort.

Exclusion criteria:

- 1-Previous perineal operation.
- 2- Malposition.
- 3- Instrumental delivery.
- 4- Premature baby
- 5- Fetal distress.
- 6- Short or rigid perineum.
- 7-Induction of labour.
- 8- pelvic deformities.
- 9- Medical problems like (hypertension, diabetes, heart disease...ect).
- 10.Any women refused to participate

Methods of data collection:

All cases were collected in the labour ward during labour, after taking full history& clinical examination, and assessment of pelvis

by clinical pelvimetry with assessment of fetal size, then taking permission from the patient, and decide not to perform episiotomy for her. Then after she delivered, and suturing of the tear (if present) and stabilizing the patient condition, the questionnaire form filled. Observation & follow up done for 24hours,after 1week, at 6 weeks for the women to determine any postpartum complications like postpartum hemorrhage, perineal hematoma, perineal pain, urinary problems, vaginal discharge, urinary or fecal incontinence, While at 6 weeks also the women were asked for any pain during intercourse (dysparunia).

Statistical analysis:

Different statistical analysis: what are the real methods used, mention them separately for each group like descriptive (mean, standard deviation, graphical presentation) & inferential statistic was performed on STATGRAFICS plus software using chi-square test .P-value <0.05 was considered as a statistically significant value.

Ethical approval was confirmed by acceptance of the women to give informed consent and the local institute approved the research.

Results & finding:

One hundred fifty two primigravida women allowed to be delivered normally without episiotomy.

The results were 53 cases (34.9%) with intact perineum (group 1), 65 cases (42.8%) with 1st degree perineal tear (group2), and 34 cases (22.4%) with 2nd degree perineal tear (group3). There were no cases of 3rd or 4th degree perineal tear. As shown in Figure (1)

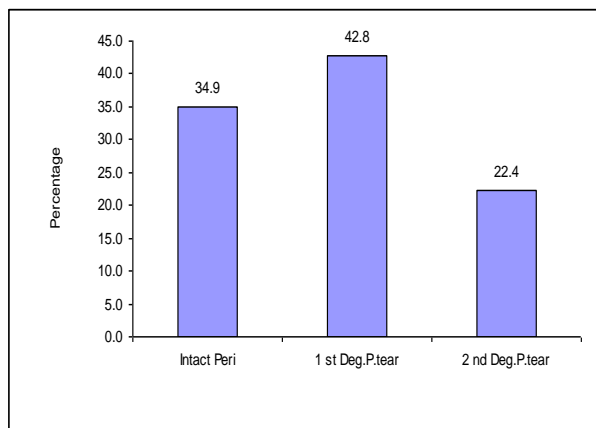


Fig. 1. Sequence of spontaneous delivery without episiotomy

The mean age of women were 21.6 years; 22.8 years, 22.2 years in the three groups respectively. And the mean gestational age was 38.9 weeks, 38.7 weeks, and 38.8 weeks of the groups respectively. Most of them were house wives except 10 in group 1, 6 in group 2 and 5 in group 3 who were employee. According to their residency 74 of them were from Sulaimani city (27 in group 1, 32 in group 2, 15 in group 3), the remaining were from country side. As shown in table 1

Table 1: Statistical Description of socio-demographic variables of the sample

	Group 1 n=53	Group 2 n=65	Group 3 n=34
Age(years) mean± SD	21.6±3.8	22.8±4.3	22.2±3.7
Gestational age(week) mean± SD	38.9±1.2	38.7±1.04	38.8±1.13
Residency			
side Sulaimani	27 (50.9%)	32 (49.2%)	15(44.1%)
Country side	22 (41.5%)	26 (40%)	18(52.9%)
Rural area	4 (7.5%)	7 (10.7%)	1(2.9%)
Occupation			
House wives	43 (81.1%)	59 (90.7%)	29 (85.2%)
Employee	10 (18.8%)	6 (9.2%)	5 (14.7%)

Sixty nine cases (45.39%) didn't need suturing (53 with intact perineum & 16 with superficial mucosal tear).

Forty two cases (27.6%) were associated with anterior & lateral vaginal wall tears (31 cases with 1st degree & 11 cases with 2nd degree tears). The mean weight of babies were 3.08 kg ± 0.36 kg standard deviation. The relation between baby's weight and occurrence and degree of tear was statistically significant since p-value was 0.02. As shown in Table (2)

Table 2: The relation between baby's weight with type and degree of perineal tear among 152 cases.

Baby weight (g m)	Group 1	Group 2	Need suturing		Total
			Need	Not need	
2.100-2.500	5	5	3	2	10
2.550 - 3000	24	29	24	5	14
3.050 - 3.500	17	30	22	8	18
3.550 - 3.900	7	1			2
Total	53	65	49	16	34

p-value=0.02

all cases with group 3 needed suturing*

In 1st 24 hours 5 cases went home without follow up & had no contact with them, so they were excluded from the study. From the remaining 147 cases; 12 (8.16%) had pain in group 1, 36 (24.4%) had pain in group 2 & 27 (18.3%) had pain in group 3. 6 cases (4.08%) couldn't sit comfortably in group 1, 9 cases (6.1%) couldn't sit comfortably in group 2 & 23 cases (15.6%) couldn't sit comfortably in group 3. There was only one case (0.65%) of

primary post partum hemorrhage & one case (0.65%) of perineal hematoma (both in group 3), one case had urinary problems in group 1, and one case in group 2, while 4 cases (2.7%) had urinary problems in group 3. As shown in Table (3)

Table 3: Distribution of the sample size (147cases) regarding their according to complications in 1st 24 hours

	Perineal pain	Cannot sit comfortably	Post partum Hemorrhage	Hematoma	Urinary problems
Group 1 n=51	12 (8.16%)	6 (4.08%)	Nil	Nil	1 (0.68%)
Group 2 n=62	36 (24.4%)	9 (6.12%)	Nil	Nil	1 (0.68%)
Group 3 n=34	27(18.36%)	23 (15.6%)	1 (0.68%)	1 (0.68%)	4 (2.7%)
Total N=147	75(51.02%)	38(25%)	1 (0.68%)	1 (0.68%)	6(3.9%)

*5 cases have been excluded because they went home immediately after delivery & we lost contact with them

After one week, we lost contact with 18 cases .From the remaining 134 cases, 19 cases (14.1%) had slight perineal pain (1 in group 1, 6 in group 2, 12 in group 3), 13 cases (9.7%)

couldn't sit comfortably (1 in group 2 & 12 in group 3), 13 cases (9.7%) develop urinary tract infection (5 in group 2 & 8 in group 3). There was only one case (0.74%) with perineal infection in group 3, no cases of secondary post partum hemorrhage, no incontinence of urine or feces. As shown in Table (4)

Table 4: Distribution of the sample size (134cases) regarding their complications after 1 week

	Perineal pain	Cannot sit comfortably	p.p. hg	Urinary problems	Infection	Incontinence (Urine, feces)
Group 1, n=48	1(0.74%)	Nil	Nil	Nil	Nil	Nil
Group 2, n=55	6(4.4%)	1(0.74%)	Nil	5(3.7%)	Nil	Nil
Group 3, n=31	12(8.9%)	12(8.9%)	Nil	8(5.9%)	1(0.74%)	Nil

* We lost contact with 18 cases & we exclude them,

At 6 weeks we lost contact with 54 cases & 98 cases remain. Two cases (2%) develop urinary incontinence (1 over flow in group 1 & 1 stress incontinence in group 3). Two cases (2%)

develop superficial dysparunia (1 in group 1 & 1 in group 3), 58 cases had no dysparunia, and 38 cases had no sexual contact. As shown in Table (5).

Table 5: Distribution of the sample (98cases) regarding their complications at 6 weeks

	Incontinence (Urine,feces)	Dysparunia
Group 1 n=40	1(1.02%)	1(1.02%)
Group 2 n=34		
Group 3 n=24	1(1.02%)	1(1.02%)

* We lost contact with 54 cases&excluded them

There were no cases of p. pain, sitting uncomfortable, pph, p. infection, and urinary problems in the 3 groups.

Discussion:

Episiotomy is a widely carried out intervention during childbirth, regardless of poor scientific evidence of its benefits. As the procedure has been wide spread since the 1930s it has been subjected to careful evaluation only fairly recently.[6,7]

Hartmann et al reviewed 26 trials from 1950 to 2004, each of which included at least 40 participants. For short term maternal outcomes, they restricted their review to randomized clinical trials. When long-term outcomes were assessed, they included non randomized trials and prospective cohorts.[8]

Short-term outcomes included third-and fourth-degree lacerations, pain, wound healing, and blood loss. Long –term outcomes included incontinence, pelvic floor defects, and sexual function.

The findings: Immediate maternal outcomes were not improved with routine episiotomy. Though there is a lack of long-term follow-up into the age range most likely to have pelvic floor sequelae, episiotomy does not appear to prevent fecal and urinary incontinence or pelvic floor relaxation, or to preserve sexual function. These findings exactly mirror those

of a Cochrane review by Carroli and Belizan. Both reviews make it clear that routine episiotomy is outdated.[8]

In this study it was observed that 53 cases (34.9%) remain with intact perineum, 65 cases (42.8%) had 1st degree p. tear &34 cases (22.4%) had 2nd degree p. tear, there were no cases with 3rd or 4th degree tears. Half of cases had no pain, and only one case of primary post partum hemorrhage in 1st 24 hours (in group 3) Cochrane Database review: found no differences in vaginal or perineal trauma, dysparunia, or urinary incontinence between patients with &without episiotomy. Patients who had an episiotomy had less risk of anterior perineal trauma, but an overall greater risk of posterior perineal trauma and other complications.

The reviewers concluded that restrictive episiotomy utilization is preferable to routine utilization. [9]

Also from the results obtained in this study , where episiotomy not performed, Forty two cases(27.6%) were associated with anterior&lateral vaginal wall tears (31 cases with 1st degree&11 cases with 2nd degree tears)

Based on studied data, the researchers found that women who had not undergone the procedure were no more likely to experience spontaneous tears during childbirth than those who had. In fact, those who underwent the procedure appeared somewhat more prone to tears .[10]

As a result, research has found that women who have had episiotomies tend to need more stitches and experience more pain after child birth. [10]

With regard to this study as episiotomy was not performed 53 cases (34.9%) remain with intact perineum, Sixty nine cases (45.39%) didn't need suturing (53with intact perineum&16with superficial mucosal tear),

and only 83 cases (54.6%) from a total of 152 cases that needed suturing.

Review of 26 studies of episiotomies published in the May 2005 Journal of the American Medical Association showed that episiotomies are linked with a higher risk of injury, more trouble healing, and more pain. Episiotomies also did not help with incontinence, pelvic floor strength, or sexual function. Women who had the procedure, waited longer to resume sex after childbirth and experienced more pain with intercourse. [10]

In this study, the cases were only followed up for 6 weeks and it was found that only 2 cases (2%) develop urinary incontinence (one overflow in group 1, and one stress incontinence in group 3), and there were no cases with fecal incontinence, also in those who performed sexual contact only 2 cases (2%) develop superficial dyspareunia (one in group 1 & one in group 3).

Even more surprising, studies show that severe tears-known as third- or fourth-degree lacerations (ones that are close to or through the rectum) are actually more common with an episiotomy. For example, when doctors at several Canadian hospitals reviewed outcome in women who had episiotomies versus women who did not, they found that 52 of the 53 women studied who experienced third- or fourth-degree tears had undergone an episiotomy. [11]

With regards to this study, cases with 3rd or 4th degree tears were not found.

In this study one third of cases remain with intact perineum, in which it means that episiotomy should not be performed as a routine procedure and must be restricted to indicated cases for mother or fetus, and its rate

must be decreased. Dr. Marsden Wagner stated that WHO recommendations are that episiotomy should be around 10%, and no more than 20%. [12]

Conclusion:

- ❖ Episiotomy should be restricted to specific maternal or fetal conditions, since there is no reliable evidence that the routine use of episiotomy has any beneficial effects, and there is clear evidence that it may cause harm.
- ❖ Restrictive use of episiotomy was associated with increased likelihood of having an intact perineum, decreased risk of requiring sutures, but with an increased risk of anterior perineal lacerations.

Recommendation:

- ❖ We recommend restricting the use of episiotomy for indicated cases, and routine use of episiotomy should be abandoned.
- ❖ Independent of specifically contracting the pelvic floor muscles (Kegels), a regular exercise program strengthens the pelvic floor therefore; we encourage the pregnant lady to attend antenatal classes.
- ❖ Further research that confirms our data with a larger number of women needed

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