

Post Episiotomy Physical and Psychological Morbidities in Al Azhar University Hospital of Assiut -Upper Egypt

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Abstract

Background: Episiotomy is performed as one of the most common surgery procedure to facilitate delivery and prevent complications of hard labour in both mother and her neonate. Routine episiotomy is a controversial issue among obstetricians.

Objectives: To compare between episiotomy and non-episiotomy perineal lacerations as regard to physical and psychological morbidities after spontaneous vaginal delivery.

Patients and methods: This is a prospective case control study performed on 400 pregnant women (primi & second gravidae), full term gestation from those attending delivery ward of Obstetrics and Gynecology department of Al-Azhar university hospital at Assiut governorate of Upper Egypt. Women were classified into 2 equal groups according to whether or not episiotomy was performed. (Group I = with episiotomy) and (Group II = without episiotomy). Each group was followed up throughout the duration of puerperium for physical and psychological morbidities.

Results: Compared to non-episiotomy, the episiotomy group was significantly higher in the perineal pain scores ($P < 0.01$), the mean blood loss (109 ± 52 vs. 63 ± 36 ml $p < 0.01$), dysuria, constipation and dyspareunia (36.0% vs 45.5%, 6.0% vs 1.5% and 20.5% vs 12% respectively) while the return to normal activities after two weeks was lower in this group (25% vs 85% $P < 0.01$).

Conclusion: In term pregnancies with spontaneous vaginal deliveries, the episiotomy group had more risk of physical and psychological morbidities than non-episiotomy group

Keywords: Episiotomy, Perineal laceration, Physical and psychological morbidities

Introduction

Episiotomy is a surgical incision into the perineal body to enlarge the vaginal opening to facilitate birth or to prevent perineal tears. Although it is one of the most commonly performed surgical procedures during delivery, there is extensive disagreement about the necessity and benefits of this procedure [1].

Episiotomy was first suggested by Ould as an aid in difficult vaginal deliveries. It was not used until 1920, following articles published by De Lee and Pomeroy that the routine use of episiotomy became widespread [2-4]. Prevention of severe

perineal tears was advocated as a benefit of routine episiotomy in primiparous women [5].

In the United States, there has been a steady decline in episiotomy rates from 62% in 1987 to 30 – 35 % in 2003 [6].

Episiotomy, actually increased rates of perineal infection, blood loss, pain during healing, negatively affected body image issues and sexual function, and incidence of injuries to the anal sphincter with subsequent increased risks of incontinence of flatus and fecal material. Multiple studies demonstrated that the routine use of episiotomy did not protect against pelvic relaxation or fetal intracranial hemorrhage [5].

Episiotomy may increase perineal pain during postpartum recovery, resulting in trouble defecating, particularly in midline episiotomies. In addition it may complicate sexual intercourse by making it painful and replacing erectile tissues in the vulva with fibrotic tissue [7]. Women who underwent episiotomy reported more painful intercourse and insufficient lubrication 12–18 months after birth, but did not find any problems with orgasm or arousal [8].

Patients and Methods

This is a prospective case control study conducted on 400 full term pregnant women (primi & second gravidae) from attendants of delivery ward of Obstetrics and Gynecology department of Al-Azhar university hospital of Assiut governorate of Upper Egypt. The study was approved by the Regional Committee for Medical and Health Research Ethics of Al Azhar University of Assiut. Pregnancy was singleton term without underlying medical or any pregnancy-related complications for whom spontaneous vaginal delivery was performed.

Women were allocated into 2 equal groups (200 for each) according to whether or not episiotomy was performed (Group I = with episiotomy) and (Group II= without episiotomy). An informed signed written consent was obtained from all participants.

During intrapartum period, the same standard obstetrical managements were provided in both groups. Each group was

assessed after delivery for degree of perineal lacerations, blood loss, any urethral or rectal injuries and newborns for APGAR score at 1 and 5 minutes. Each group was followed up during 1st 48 hours and rest of puerperium for:

Physical morbidities include

- Blood loss from the perineal tear using the direct method of weighing swabs and measuring the volume of sucked blood in suction devices [9].
- Perineal pain score was assessed in various positions including standing, walking, lying down and sitting by using the Numerical Rating Scale (NRS) With the following pain classification (zero - absence ,1 to 3 mild ,4 to 6 moderate, 7 to 9 strong, 10 unbearable.),
- Wound infection,
- Wound hematoma,
- Return to normal activities such as sitting, walking or lifting the baby,
- urinary complication (Dysuria, urinary retention),
- fecal complications (Constipation, Fecal incontinence.),
- Dyspareunia.

Psychological morbidities as

- Anxiety and
- Depression using The Edinburgh Postnatal Depression Scale (EPDS) [10].

Statistical analysis: data was collected, tabulated and statistically analyzed using SPSS (statistical program for social science version 12). Descriptive data were reported as frequency, percentage, mean and standard deviation (S.D.) for the comparison of result, Student t-test, chi-Square and Mann-Whitney test were used. A p-value of less than 0.05 was considered statistically significant difference.

Results

Table 1: Demographic and clinical characteristics of the study groups.

P	T	Group II Without episiotomy (n=200)	Group I With episiotomy (n=200)	
		mean±SD	mean±SD	
>0.05	1.650	26±5	27±4	Maternal Age (yrs)
>0.05	0.703	38±1	39±1	Gestational Age(wks)
>0.05	0.23	8±1	8±1	Apgar score (1 min)
>0.05	0.34	9±1	9±1	Apgar score (5 min)

P value > 0.05 is non significant

Table 2: Perineal Pain score for both groups.

Perineal pain score	Group 1 (n=200) With episiotomy		Group 2 (n=200) Without episiotomy		Chi-square	p
	No	%	No	%		
Mild	138	69.0%	37	18.5%	103.853	<0.01
Moderate	59	29.5%	152	76.0%		
Severe	3	1.5%	11	5.5%		

P value <0.01 highly significant

Table 3: Amount of Blood loss (cc) in both groups.

	Group I (n=200) With episiotomy		Group II (n=200) Without episiotomy		T-test	P-value
	Mean±SD	Range	Mean ±SD	Range		
Blood Loss	109±52	50-300	63±36	0-150	-9.663	<0.01

P value <0.01 highly significant

Table 4: Incidence of complications in both groups.

	Group I With episiotomy (n=200)		Group II Without episiotomy (n=200)		Chi-square	p-value
	No.	%	No.	%		
Wound infection	6	3.0%	2	1.0%	2.041	>0.05
Wound hematoma	3	1.5%	1	0.5%	1.010	>0.05
Dysuria	72	36.0%	91	45.5%	3.738	<0.05
Urine retention	2	1.0%	1	0.5%	0.336	>0.05
constipation	12	6.0%	3	1.5%	5.61	<0.05
Fecal incontinence	1	0.5%	1	0.5%	0	>0.05
dyspareunia	41	20.5%	24	12%	5.3	<0.05

P value >0.05 insignificant
P value <0.05 significant

Table 5: Comparing the quality of life after vaginal delivery for both groups.

	Group I With episiotomy (n=200)		Group II Without episiotomy (n=200)		Chi-square	p-value
	No.	%	No.	%		
Return to normal activities after 2 weeks	50	25.0%	170	85.0%	145.455	<0.01
Anxiety	5	2.5%	2	1.0%	1.3	>0.05
Depression	4	2%	1	0.5%	1.823	>0.05

- *P value >0.05 insignificant*
- *P value <0.05 significant*
- *P value <0.01 highly significant*

Discussion

In this study we found that there was no statistically significant difference between the 2 studied groups as regard to the maternal age (18-35 years old), this was in accordance with the studies done by Saxena et al. and Chakpan et al. who concluded that there was no correlation of episiotomy or tears to the maternal age in both groups [1,5].

However our results were against the studies done by Marie et al. who found that episiotomies and lacerations were more likely if a women was 30 years or older and chigbu et al. who showed that women undergoing episiotomy were younger than women without episiotomy [11,12].

This study showed also that there was no statistically significant difference between both studied groups as regard to gestational age (37-41 weeks) and this was similar to results of the study done by Chakpan et al. [5].

In this study we found that there was no statistically significant difference between the 2 studied groups as regard to Apgar score, these results was in accordance with the results of the study done by Saxena et al. [1].

However this was against the study done Hartmann et al. who claimed that intact perineum serves to perform fetal injury [13].

A highly statistically significance was achieved between the 2 studied groups regarding the amount of blood loss which was higher among episiotomy group (50-300 cc) versus (0-150 cc) in non-episiotomy group. This was similar to the study done by John et al. who found that there is a risk of increased bleeding when episiotomy is done [14].

In contrast to our results, Murphy et al. performed a multicenter pilot randomized controlled trial in Ireland to investigate the primary and secondary postpartum hemorrhage (PPH) of routine versus restrictive use of episiotomy. They did not find any significant difference in both primary and secondary outcomes between the two mentioned methods [15].

Using the "Numerical rating scale " to calculate the score of pain felt by women of both studied groups ,there was a highly statistically significant difference between both groups, that most of the women of group (1) with episiotomy reported moderate or severe pain while most of those of group (2) without episiotomy reported no or mild pain . These results was in accordance with the studies done by John et al and Macarthur et al. who found that with episiotomy women had more postpartum pain than without episiotomy [14,16].

Results of this study were also in accordance with a similar study in Tehran done by Moini et al. who reported the total rate of severe perineal tears in routine episiotomy to be significantly higher than restrictive episiotomy [17]. They concluded that routine episiotomy is associated with an increased risk of severe perineal tears and subsequent complications especially pain.

There was also another study done by Vansanth et al. concluded that obstetric anal sphincter injury is associated

with more perineal pain than other perineal trauma and that spontaneous second degree tears cause less perineal pain than episiotomies [18].

However on the other hand the study done by Chakpan et al. was against our results and concluded that perineal pain score at 24-hours and 48-hours postpartum were the same in both groups [5]. Carroli et al. in their study did not observe differences in most pain measures between the two studied groups [19].

As regard to wound infection our study showed no statistically significant difference in both groups and that was in agreement with the results of the study made by Malla et al. who said that it has noted no change in perineal infection in both groups [20].

Regarding to wound hematoma our study showed no statistically significant difference between both groups.

As regard to dyspareunia this study showed a statistically significant difference between both groups and that was similar to the results of the study done by John et al. who found that episiotomy causes more postpartum dyspareunia and sexual dysfunction than perineal lacerations [14].

As regard to urinary complications this study showed a statistically significant difference between both groups regarding dysuria and this was with the study done by Kroop et al. that concluded that pain caused by episiotomy can cause discomfort with passing urine. On the other hand no statistically significant difference was found regarding urine retention [21].

Regarding to fecal complications our study showed a statistically significant difference between both groups as regard to postpartum constipation and no statistically significant difference could be found as regard to fecal incontinence.

Our study showed also a highly statistically significant difference between both groups as regard to return to normal activities and this result was in agreement with the studies done by Kindberg et al. and Hedayati et al. who reported that pain and discomfort related to perineal trauma interfere with women's daily activities postpartum such as sitting, walking and lifting her baby [22,23].

As regard to mental changes(anxiety & depression) this study showed no statistically significant difference between both studied groups and this was against the study done by Navvabi et al. who concluded that the pain caused by episiotomy can cause mental changes in mother and change her attitude and activities towards her neonate [24].

Conclusions

The results of our study showed that episiotomy does not prevent tears, on the other hand if the woman does not have an episiotomy, she is likely to have a small tear but not worse than the episiotomy, also it does not prevent pelvic relaxation. Therefore, they do not improve sexual satisfaction and it does not improve fetal outcome or prevent birth injuries. Episiotomies are not less painful than tears; they may cause prolonged physical and mental disorders. It may rather increase rates of perineal

infection, blood loss, and pain during healing, negatively affected body image issues and sexual function, and incidence of injuries to the anal sphincter with subsequently increased risks of incontinence of flatus and fecal material. Routine episiotomy was associated with an increased risk of severe perineal tears and subsequent complications especially pain, dyspareunia, and incontinence.

Recommendations

Episiotomy is not essential or beneficial in every delivery, so it should not be a routine procedure during delivery and should be individualized according to maternal and/or fetal indications.

References

1. Saxena RK, Sandhu GS, Babu KM, Bandol H, Sharma Gargi V. Restricted use of Episiotomy. *J Obstet Gynecol India*. 2010; 60(5): 408-412.
2. Ould FA: A treatise of midwifery. Dublin: Nelson and Connor; 1742.
3. Gabbe SG, DeLee JB. The prophylactic forceps operation 1920. *Am J Obstet Gynecol*. 2002; 187(1): 254-5.
4. Pomeroy RH. Shall we cut and reconstruct the perineum for every primipara? *Am J Obstet Gynecol*. 1918; 78-211.
5. Chakpan S, Kusathin B, Sayomporn K, Suthee P. Third and Fourth Degree Perineal Lacerations of Episiotomy Versus Non-Episiotomy in Spontaneous Vaginal Deliveries at Phramongkutklo Hospital. *Thai Journal of Obstetrics and Gynaecology*. 2008; 16: 199-205.
6. American College of Obstetricians and Gynecologists. Episiotomy. ACOG Practice Bulletin No. 71. *Obstet Gynecol*. 2006; 107(4): 956-62.
7. Signorello LB, Harlow BL, Chekos AK, Repke JT. Midline episiotomy and anal incontinence: retrospective cohort study. *BMJ*. 2000; 320(7227): 86-90.
8. Ejegård H, Ryding EL, Sjogren B. Sexuality after Delivery with Episiotomy: A Long-Term Follow-Up. *Gynecol Obstet Invest*. 2008; 66(1): 1-7.
9. P.K. T, Z. Q. G. N. (2011) Estimation of blood loss after vaginal delivery. *J Obst Gynae East Central*. 23(2): 55-60.
10. Cox JL, Holden JM, Sagovsky R. Detection of postnatal depression: Development of the 10-item Edinburgh Postnatal Depression Scale. *Br J Psychiatry*. 1987; 150:782-786.
11. Hastings-Tolsma M1, Vincent D, Emeis C, Francisco T. Getting through Birth in one piece, protecting the perineum. 2007; 32(3): 158-64.
12. Chigbu B, Onwere S, Aluka C, Kamanu C, Adibe E. Factors influencing the use of episiotomy during vaginal delivery in south eastern Nigeria. *East Afr Med J*. 85(5): 240-243
13. Hartmann K, Viswanathan M, Palmieri R, Gartlehner G, Thorp J Jr, Lohr KN. Outcomes of routine episiotomy. Asystematic review. *JAMA*. 2005; 293(17):2141-8.
14. Scott JR. Episiotomy and Vaginal Trauma, *Obstet Gynecol Clin North Am*. 2005; 32(2): 307-321.
15. Murphy DJ, Macleod M, Bahl R, Goyder K, Howarth L, Strachan B. A randomised controlled trial of routine versus restrictive use of episiotomy at operative vaginal delivery: a multicentre pilot study. *BJOG*. 2008; 115(13): 1695-702.
16. Macarthur AJ, Macarthur C. Incidence, severity and determinants of perineal pain after vaginal delivery: a prospective study. *Am J Obstet Gynecol*. 2004; 191(4):1199-204.
17. Moini A, Yari RE, Eslami B. Episiotomy and third- and fourth-degree perineal tears in primiparous Iranian women. *Int J Gynaecol Obstet*. 2009; 104(3): 241-2.
18. Andrews V, Thakar R, Sultan AH, Jones PW. Evaluation of postpartum perineal pain and dyspareunia –A prospective study. *Eur J Obstet Gynecol Reprod Biol*. 2008; 137(2): 152-156.
19. Carroli G, Mignini L. Episiotomy for vaginal birth. *Cochrane Database Syst Rev* (1): CD000081. 2012.
20. Malla DS. Episiotomy: A Challenging Obstetric Intervention. *JNMA J Nepal Med Assoc*. 2003; 42: 54-58.
21. Kropp N, Hartwell T, Althabe F. Episiotomy rate from eleven developing countries. *Int J Gynaecol Obstet*. 2005; 91(2): 157-159.
22. Kindberg S, Stehouwer M, Hvidman L, Henriksen TB. Postpartum perineal repair performed by midwives: a randomized trial comparing two suture techniques leaving the skin unsutured, *BJOG*. 115(4): 472-479.
23. Hedayati H, Parsons J, Crowther CA. Topically applied anesthetics for treating perineal pain after childbirth. *Cochrane Database Syst Rev*. 2005; 18(2): CD004223.
24. Navvabi Rigi SH, kerman-saravi F, Saroneh Rigi M, Abedian Z. Cold and Reduced Episiotomy Pain Interfere with Mood and Daily Activity. *Shiraz E Medical Journal*. 2011; 12(2): 87-92.