

Comparison of Perinatal Outcome in Deliveries with and without Episiotomy

Dr Prakeerti Verma¹, Dr. Himani², Dr Kishor P Chauhan³

^{1,2}3rd yr Postgraduate in OBGY, Sumandeep Vidyapeeth, Vadodara, Gujarat, India

³Guide, Professor and HOD, OBGY, Sumandeep Vidyapeeth, Vadodara, Gujarat, India

1. Introduction

- Episiotomy is the “surgical procedure for enlarging the vaginal orifice by an incision on perineum, at the time of crowning, last part of 2nd stage of labor”.
- It in itself is an iatrogenic second degree perineal tear with an association with extension to complete perineal tear.
- Episiotomy does not significantly affect or improve neonatal outcome or provide protection to the pelvis.
- Episiotomy shortens second stage of labor is a wrong belief as it affects second stage by just few seconds which does not hold any significance.
- Now a days, episiotomy should be avoided as far as possible
- At most places, restrictive episiotomy is in trend. ⁽²⁾

2. Aims and Objectives

The aim of the study is to establish the effect of episiotomy in relation to perinatal outcome..

2.1 Objectives

To compare perinatal outcome in deliveries with and without episiotomy

3. Materials and Methods

- **Study Design:** It is a prospective randomized clinical trial study.
- **Study Site:** Department of obstetrics and gynaecology, Dhiraj hospital, Vadodara.
- **Sample Size**
- 1st 50 patients falling in the inclusion criteria:

Group A: with episiotomy

Group B: without episiotomy

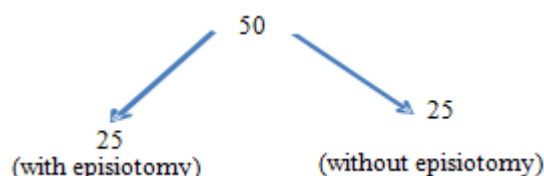
Fetal Outcome was judged by:

- NICU admission
- APGAR score
- Incidence of Birth Asphyxia
- CIAB (Cry Immediately After Birth) or Not Cried

Selection Criteria

Inclusion Criteria

- 50 patients (nullipara) who underwent NORMAL DELIVERY were selected.



- (Randomization was done by selecting alternative primigravida patients within the inclusion criteria in each group after taking detailed history and examination).

Exclusion Criteria

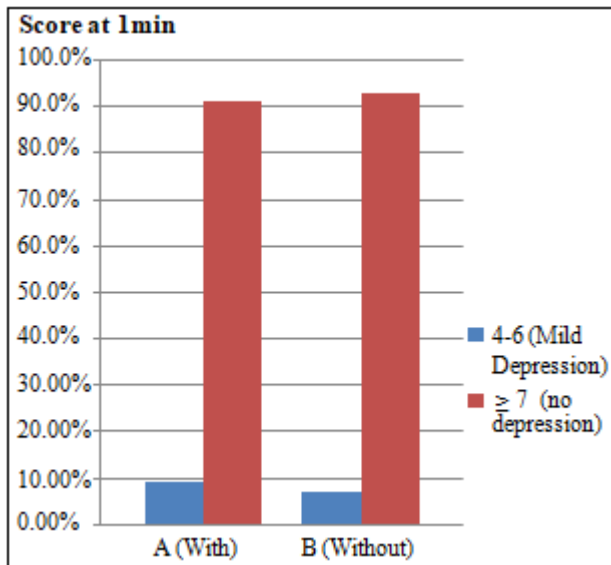
- All high risk patients
- Chronic hypertension, pre eclampsia and eclampsia • Pre existing or gestational diabetes
- Heart diseases
- Antepartum haemorrhage
- Any contraindication to vaginal delivery(HIV, HSV, caesarean section, instrumental delivery etc)
- Patients not willing to participate

4. Result

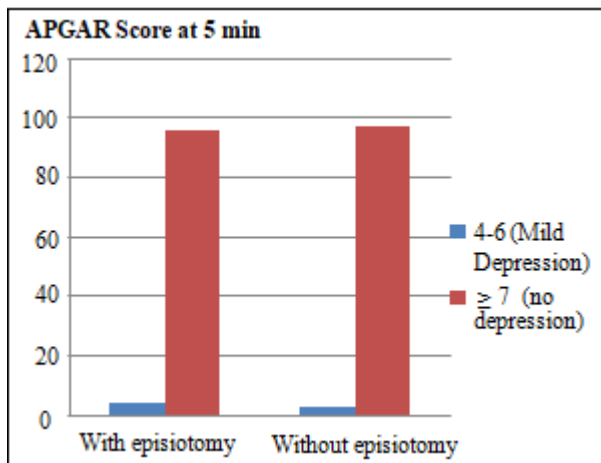
In this study total number of deliveries analysed were 50 In cohort A : episiotomy was given to 25 cases and in cohort B: episiotomy was not given.

Total subjects in both the groups' cohort a- 25
COHORT B -25

Time	APGAR Score	GROUP		p value
		A (With)	B (Without)	
1 min	4-6 (Mild Depression)	9.00%	7.00%	0.265
	≥ 7 (no depression)	91.00%	93.00 %	
5 min	4-6 (Mild Depression)	4.00%	3.00%	0.354
	≥ 7 (no depression)	96.00%	97.00 %	



- In above table and graph, percentage of APGAR Score at 1 min has been shown for both with episiotomy and without episiotomy groups and further more we have done comparison of mild depression at 1min between both Group A and Group B, i.e. (9.00% and 7.00%). From above results it has been concluded that there was no significant difference seen between both groups.



- In above graph, percentage of APGAR Score at 5 min has been shown for both groups and further more we have done comparison of mild depression at 5 min between both Group A and Group B(4.00% and 3.00%). From above results it has been concluded that no significant difference has been seen between both groups.

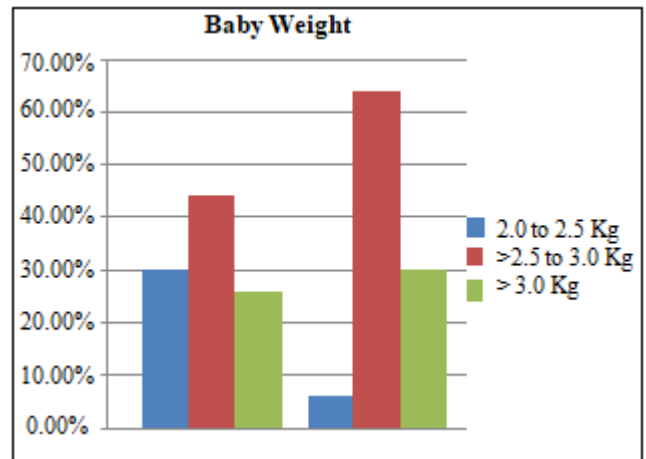
NICU Admissions

Group	No	Yes
A	24	1
B	23	2
TOTAL	47	3

p Value : 0.68

Table 3: Comparison of Baby weight between Group A & B

Group	Baby Weight		
	2.0 to 2.5 Kg	> 2.5 to 3.0 Kg	> 3.0 Kg
A	30%	44%	26%
B	6%	64%	30%



- In above table and graph, percentage of Baby weight more than 3 Kgs has been shown for both groups and further more we have done comparison of higher number of newborns with weight more than and equal to 3 kg between both Group A and Group B, i.e. (26.00% and 30.00%).

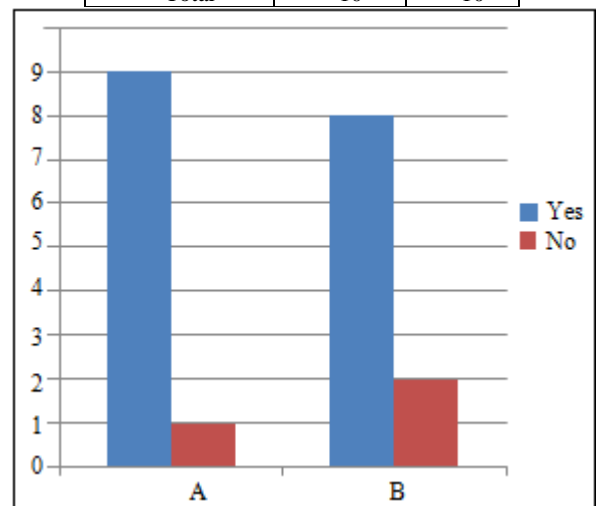
Table 3: Comparison of complication (in baby) with baby weight ≥ 3 Kg between Group A & B

Group	Baby Weight		
	2.0 to 2.5 Kg	> 2.5 to 3.0 Kg	> 3.0 Kg
A	5.00%	4.00%	4.00%
B	2.00%	3.00%	6.00%

- In above table, percentage of complication occurred with Baby weight more than 3 Kgs has been shown for both groups and further more we have done comparison of higher number of complications seen in newborns with weight more than and equal to 3 kg between both Group A and Group B, i.e. (4.00% and 6.00%). From above results it has been concluded that there was a higher number of complications seen in newborns with weight more than and equal to 3.0 kg in group B compared with group A.

Cry Immediately after Birth (CIAB)

Group	Yes	No
A	9	1
B	8	2
Total	10	10



P value: 0.78

- In above table and histogram ,frequency of baby who cried immediately after birth has been shown and comparison done between the two groups and we have found that with episiotomy group there were total 90.00% of newborn who cried immediately after birth whereas in without episiotomy group 80.00% of newborn cried immediately after birth ; which is not significant.
 - In above table, NICU admission has been shown and done comparison between the two groups and we have found that results were non significant.
- [3] Signorello LB, Harlow BL, Chokos AK, et al. Midline episiotomy and anal incontinence: Retrospective cohort study. *BMJ* 2000;320(7227):86-90.
- [4] Sleep J, Grant A. West Berkshire perineal management trial: three year follow-up. *BMJ* 1987; 295:749— 51.
- [5] Brubaker L. Vaginal delivery and the pelvic floor. *Int J Urogynecol J* 1998;9:363-64.

5. Discussion

- Episiotomy has been a common practice, in all women delivering for the first time. 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.
- The current study was performed to compare perinatal outcome in deliveries with and without episiotomy.
- Neonatal complications in neonates with estimated birth weight (EBW) < 3500 g was similar in the two groups, i.e. neonatal complication rate was not higher in without episiotomy group.

Neonatal Outcome

- There was no difference in the neonatal outcome in the two groups in our study Among the group with episiotomy there was 1 NICU admission and 2 in the group without episiotomy ; thus showing no variation.
- In a study conducted by Saxena et al.⁽³⁾ also there was no difference in the neonatal outcome in the two groups. Among this study population there were 06 admissions to NICU for birth asphyxia, 03 each in control and study group. All these neonates had been delivered with the help of an episiotomy.
- Murphy et al. ^(4, 5) performed a multicenter pilot randomized controlled trial in Ireland to investigate neonatal trauma .This is in agreement to our results and did not indicate any significant difference in both primary and secondary outcomes between two mentioned groups. Based on a randomized controlled trial performed in Germany by Dannecker et al., it can be concluded that episiotomy has no effects on APGAR scores; at neither the first nor the fifth minute.

6. Conclusion

- Thus it can be concluded that episiotomy does not alter fetal outcome in **cases of normal delivery without any complication.**
- Episiotomy should be avoided in ALL cases.

References

- [1] Goodell W. A critical inquiry into the management of the perineum during labor. *Am J Med Sci* 1871;61:53— 79.
- [2] DeLee JB. The prophylactic forceps operation. *Am J Obstet Gynecol* 1920;1:34.