Study on
Complication Of Episiotomy
at
Maternity Hospital

A Final Report of the Research Study
Submitted to the Research Committee of
Paropakar Shri Panch Indra Rajya Laxmi Devi Maternity Hospital
Thapathali, Kathmandu

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Introdution

The Episiotomy is a frequently performed surgical procedur in labour room, which was first described by Ould in 1972.

The arguments in supports of episiotomy are - it preven perineal damage, pelvic floor relaxation, protects foetus fro injuries, it heals quickly than raged tear [2,3]

But recent comprehensive review of the literature could find n evidence to support these proposed benefits.[2]

A study on complication of episiotomy at Maternity Hospit was done to find out frequency, indications, category operators and frequency of complication like hemorrhag extension and/or re-suture of the wound.

Objective

To study different aspects of Episiotomy procedure at Maternity Hospital, Thapathali.

Specific Objectives

1. To find out the frequency of this procedures in delivery cases.

2. To enlist the indication of this procedure.

3. To categorize the health workers who has given the Episiotomy and sutured it.

4. To evaluate the complication like extension of episiotomy, haemorrhage and resuture under general anaesthesia.

Methodology

This is hospital based prospective study carried out at 300 bedded maternity hospital Thapathali

Annually there are about 14500 deliveries with 90% vaginal delivery. In the year 2055 there were 14488 deliveries and 50% had episiotomy.
The questionnaires for present study prepared and pre-tested before the use.

The study done from 2056.3.1 to 2056.5.4 (June 15 to August 20 1999). The total study cases were 1017, each delivery was recorded six days a week except Saturday. Every day episiotomy cases recorded in the questionnaire as well as in the data sheet. They were followed up in the ward till discharge.

Interim analysis was done when 50 cases of episiotomy were recorded. Cross check was done from record section, OT and Labor room records.

Data were presented in tables, charts and proportion and percentages were deduced.

RESULTS

Frequency of Episiotomy

Total Delivery	Total Episiotomy	Cases without Episiotomy
2059	**1017** **49.3%**	**1042** **50.6%**

	Total	%	Total
Primi with Episiotomy	**851**	**83.6**	
Primi without Episiotomy	**341**	**32.7**	**Total Primi 1192(57.8%)**
Multi with Episiotomy	**166**	**16.3**	
Multi without Episiotomy	**701**	**67.2**	**Total Multi 867 (42.1%)**

Total delivery cases with and without Episiotomy are almost equal.

Population ratio between primi and multi is 3:2 while Episiotomy ratio is 5:1

Assisted delivery and Episiotomy cases

	Total Delivery	% Percent	Forceps Extension of Episiotomy III^0 tear	% percent of forceps Delivery	Vacuum Extension III^0 tear	% Percent of vacuum delivery	Breech	% Percent of breech delivery
Primi	851	83.6	11 2/2	1.08	57	5.67	10	0.97
Multi	166	16.3	2 2/0	0.19	18	1.87	8	0.87
Total	1017	49.3	13 4/2	1.28	75	7.49	18	1.8

Among 106 assisted delivery vacuum was more than forceps, extension of Episiotomy and III^0 tear were only in forceps deliveries.

Category of Operators.

	No Episiotomy Performed	No Episiotomy Sutured
Nursing Student	714 (72.8%)	110 (10.8%)
Hospital Nursing Staff	199 (19.5%)	19 (1.8%)
MO/MD Student	51 (5.0%)	651 (64.0%)
Senior. Doctor	17 (1.8%)	219(21.5%)
Not written	27 (2.6%)	115 (11.3%)

Majority of the incision made by nurses where as repair was done by doctors.

Injuries in 1042 cases without Episiotomy

	Primi	%	Multi	%
Laceration	24	2.3	67	6.47
I° and II°	65	6.2	272	26.2
III°	1	0.09	1	0.099

Among the cases without Episiotomy Perineal Injuries were 430 (41.3%) cases.

Early Complication with Episiotomy

	Primi	%	Multi	%
Extension of Episiotomy	6	0.58	2	0.19
Extension to III^0 tear	2	0.19		
Haematoma	1	0.097	-	-

Cases without Episiotomy and with Episiotomy III^0 tear was equal.

Immediate complication / Late complication

S.N	Age	Primi	Multi	Epi. Extension	Spontaneous Delivery	Assisted Delivery	Baby weight	Blood Transfusion	Remarks
1	18	,,		,, External Suture 4	,,	-	2.8 kg	-	Delivered by nursing student
2	26	,,		,, External Suture 4	,,	-	4 kg	-	Delivered by nursing student
3	27	,,		,, External Suture 4	,,	-	3 kg	-	Delivered by nursing student
4	21	,,		,, External Suture 4	,,	-	3.6 kg	-	Delivered by Staff Nurse
5	35	,,		External Suture 5	-	Forceps Delivery	2.5 kg	-	Delivered by Doctor
6	23	,,		,, External Suture 4	,,	-	3.3 kg	-	Delivered by nursing staff
7	31	,,		,, External Suture 5	,,	-	3.5 kg	-	Delivered by nursing students
8	23		,,	,, External Suture 6	-	Vacuum Failed forceps	2.6 kg	-	Delivered by doctor

In total Episiotomy cases, 8 cases were extended Epi, in which 2 cases were forceps delivery . The extension of Epi was more common (62.5%) in mother who had baby weighing 3kg or more.

Late complication

Date of delivery	Date of wound gap	Date of Resuture	N. Exter Suture	Para/ wt. Of baby	Antibio tics	Remarks
056.3.10	056.3.15	3.15	4 Silk	Primi 2.7kg	Cefran Metron	Fever after deliveries exploration
056.3.10	056.3.13	3.14	4 catgut	Primi 3.4kg	Cefran Metron	
056.3.14	056.3.15	3.15	2 catgut	G2P1+0 3.2kg	twiciclox	Exploration for RetPlacenta tissues
056.3.16	056.3.24	Patient dischar ge without Resture	Region was not men tioned	Primi 3.2kg	Not Written	Readmission on 056.4.27 Pri as wound

Total wound gapping were 4 (0.39%), But 3 were observed before the discharge from the hospital.
One was discharged without resuture.
Total complication (immediate and late in 1017 episiotomy cases were 17 (1.8 %)

Discussion

Most of the literature had discussed about long term effect of complication in relation to episiotomy. The subject discussed were dyspareunia, lax vagina, urinary and fecal incontinence.

The rate of episiotomy for spontaneous vaginal delivery at university of California was 86.8% in 1976[2]. However the frequency of this procedure was 37.1% at HARHUS University Hospital in 1945[5]. The frequency of episiotomy in the present study was 49.3%. Among which primi 83.6% and multi 16.3%

The study of Argentina episiotomy trial collaborative group has suggested a routine episiotomy should be abandoned and a rate of more than 30% is not justifiable[6]. Indeed the common indications for episiotomy are rigid perineum and impeding perineal tears. However in present study 10.4%

episiotomy were performed for assisted deliveries and the rest were done routinely for rigid perineum.

If the midwives are made aware about the indications of episiotomy the incidence of intact perineum will increases. In this study there were 4 cases of third degree perineal tear equal number in episiotomy and non- episiotomy group.

In the present study 72.8% of episiotomy were performed by Nursing student, and 85.5% of the episiotomy repaired by the doctors. If the nurses have to stitch the case probably the frequency of episiotomy would have been less.

The relation of the episiotomy to perineal morbidities has been studied by many and one of them showed that midline episiotomy is associated with increased risk of third & fourth

degree perineal laceration[7]. Nearly all the episiotomy given in this hospital is right medio-lateral.

Among 19 women five has shown perineal and spincter scar. Six women in this group has urge facal incontinence[8]. In includes that inccidence of slpincter damage increases with perineal scar. Local pathology like episitomy scar [9], implant of squamous cell carcinoma[10] of uterine cervix has been also reported in the literature.

We have studied mostly the immediate complication of episiotomy like haematoma extension of episiotomy & dehisence. The total complication rate was is 1.8% which is fairly low. The episiotomy is five times more common in Primi than multipara.

Summary

The frequency of episiotomy was 49.3%. Nearly equal No. of women had episiotomy but primi had more than multi, 1/3 of the women who did not have the episiotomy had perineal tear of I^0 and II^0 (337). Equal No of women with episiotomy or without episiotomy had III^0 perinal tear (2 each) tear. In assisted forcep delivery 15 % had III^0 tear, 30 % had extension of episiotomy while both III^0 tear was in primi gravida. There were also (2) III^0 tear , where there was no episiotomy, one in primi and one in multigravida. The 73% episiotomy was given by nurses while 67% of all episiotomy was repeared by doctors.

The complication rate : There was one haematoma extension of episiotomy and 4 cases of third digree perinial tear.

CONCLUSION

Most of the episiotomy incision are made by the nurses, whereas repairs are done by the doctors.

If nurses are trained to repair the wound and to understand the indications of the episiotomy, it may reduce the frequency of the procedures and doctors will have more time to look after the high risk cases and other works.

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QUESTIONNAIRE

1. S.No :. ..... Registration No.
2. Name :.....Husband's Name :.....
3. Address : .....
4. Age :.....
5. Occupation : .....
6. Education : .....
7. Gravida : ..... Parity : .....
8. Age at menarche :..... M/H .....
9. LMP:.....EDD..... a. Premature
10. Age of marriage :..... b. Full term
11. HIstory of medical disease/STD :..... .....
12. History of any previous surgery :.....
13. Presentation :.....Postion :..... Membranes :.....
14. Foetal heart rate :.....
15. Vaginal Examination :.....
16. Nature of labour : a. Spontaneous.....b. Induced.....c. Augmented.....
17. Duration of labour : 1st stage..... 2nd stage..... Total duration.....
18. Indication of episiotomy :.....
19. Person who was performing the episiotomy :.....
20. Person who delivered :.....
21. Type of delivery : a. Normal b. Breech c. Vaccum d. Forcep e. Other
22. Suturing : Starting time :.....Time of completion.....
23. Person who sutured:
    a. Nurse : Student Nurse ☐ Staff Nurse ☐ ANM ☐
    b. Doctor : Student ☐ Intern ☐ MO ☐ SHO ☐
    c. Any Other.....☐
24. Type of Suture material : Ch.Catgut ☐ Vicryl ☐ Thread ☐
25. Interval between incision and repair : .....
26. No. of external Suture : .....
27. Time when women left the labour room/Admission room/Operation Theater:.....
28. Infant : Male ☐ Female ☐
29. Weight : ..... Apgar ☐
30. Admission to PBU: Yes ☐ No ☐

Date: ..... Form filled by: .....