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## Episiotomy and its complications: A cross sectional study in secondary care hospital

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### Abstract

Episiotomy is a commonly performed procedure at the time of vaginal delivery to prevent perineal lacerations. A study was conducted to evaluate the complications of episiotomy. A sample size of 235 patients was taken. The complications were divided in two groups depending on the time of occurrence after delivery. Out of 235 patients, immediate complications were reported in 10(4.3%) patients. These included perineal tears, postpartum haemorrhage, extended episiotomy, perineal pain, inability to pass urine or stool and vaginal haematoma. Early complications including wound infection, gaping wound and resuturing of wound were reported in 21(8.9%) patients. On multivariate analysis, it was seen that age (19-29 years) was significantly associated with complications. Mediolateral episiotomy is a safe obstetrical surgical procedure in order to prevent third and fourth degree perineal tears and is not associated with increased incidence of complications.

**Keywords:** Episiotomy, perineal tears, vaginal hematoma, perineal infection

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### Introduction

Episiotomy is one of the most commonly performed obstetrical procedure<sup>1</sup> to prevent deep perineal lacerations and anal sphincter trauma.<sup>2</sup> In spite of the fact, scientific evidence does not support its routine practice. Variables that increase the need of episiotomy are primiparity, induction of labour, term pregnancy, instrumental delivery, maternal age < 35 years, neonatal weight, epidural analgesia, and lithotomy position.<sup>3</sup>

Complication of episiotomy include bleeding, perineal pain, suture dehiscence, perineal bruising, perineal oedema, vaginal haematoma, anal sphincter damage and dyspareunia which affects the quality of life of the parturient.<sup>4</sup>

The delay in perineal wound healing also leads to bad anatomical outcomes which subsequently may lead to dyspareunia.<sup>5</sup>

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We conducted this study to observe the immediate and early complications of episiotomy in our secondary care hospital.

### Patients and Results

It was a cross sectional study conducted at Aga Khan Hospital for women, Karimabad from March 2017 till Aug 2017 after taking approval from Ethical Review Committee of Aga Khan University. A sample size of 235 patients was calculated by WHO sample size calculator version 2.0<sup>6</sup> by keeping 18.8% incidence of lacerations in patients delivered vaginally with episiotomy, 95% CI and 5% margin of error. Sampling technique was non probability convenience sampling. Patients delivered vaginally with episiotomy were included in the study. Data was collected on pre structured performa. The complications were divided in two groups depending on the time of occurrence after delivery-immediate and early. Immediate complications occurred within 24 hours of delivery while early complications occurred between 24 hours to two weeks postnatally. Data collected was analyzed in SPSS version 19.

Table-1 reports the pregnancy, labour and delivery outcomes of all patients. Forty eight percent of women had induction of labour. The first three causes for induction of

**Table-1:** Pregnancy, labour and delivery characteristics of all participants.

Variables	Total number of participants=235 n (%)	
Medical complications during pregnancy	Gestational diabetes	58 (24.7)
	Anaemia	16 (6.8)
	Others	30 (12.8)
	None	131 (55.7)
Induction of labour	Yes	113 (48.1)
	No (spontaneous)	122 (51.9)
Mode of delivery	SVD	222 (94.5)
	Instrumental delivery	12 (5.1)
Level of training	Faculty	168 (71.5)
	Trainee	67 (28.5)
Complications due to episiotomy	Immediate	10 (4.3)
	Early	21 (8.9)
	None	204 (86.8)
Birth weight of newborn (kg)	<2.5	22 (9.4)
	2.5-3.5	190 (80.9)
	>3.5	22 (9.4)

SVD=Spontaneous Vaginal Delivery

**Table-2:** Factors associated with complications of episiotomy.

Variables	Complications of episiotomy		Crude OR (95% CI) Yes(n=31)	Adjusted OR (95% CI) No (n=204)
	n (%)	n (%)		
Age (years)				
<19	1 (3.2)	1 (0.5)	0.004*	0.04*
19 - 29	26 (83.9)	124 (60.8)	(0.002-0.006)	(1.03-9.08)
>30	4 (12.9)	79 (38.7)		
Parity				
Primiparous	20 (64.5)	72 (35.3)	0.01*	0.09
1 - 4	10 (32.3)	116 (56.9)	(0.007-0.012)	(0.89-4.39)
≥5	1 (3.2)	16 (7.8)		
BMI at delivery (kg/m <sup>2</sup> )				
<18.5	0 (0)	3 (1.5)		
18.5 – 24.9	7 (22.6)	41 (20.1)	0.85	0.85
25 – 29.9	16 (51.6)	94 (46.1)	(0.84-0.86)	(0.54-1.65)
>30	8 (25.8)	66 (32.4)		
Pregnancy complications				
Gestational diabetes	5 (16.1)	53 (26)		
Anaemia	3 (9.7)	13 (6.4)	0.33	0.47
Others	6 (19.4)	24 (11.8)	(0.60-1.18)	(0.62-1.24)
Induction of labour				
Yes	17 (54.8)	105 (51.5)	0.73	0.71
No (spontaneous)	14 (45.2)	99 (48.5)	(0.54-2.44)	(0.53-2.55)
Length of first stage of labour				
< 12 hours	29 (93.5)	196 (96.1)	0.52	0.66
>12 hours	2 (6.5)	8 (3.9)	(0.12-2.92)	(0.53-2.69)
Mode of delivery				
SVD	28 (90.3)	194 (94.6)	0.23	0.44
Instrumental delivery	3 (9.7)	10 (5.4)	(0.11-1.69)	(0.13-2.39)
Level of training				
Faculty	22 (71)	146 (71.6)	0.95	0.83
Trainee	9 (29)	58 (28.4)	(0.42-2.23)	(0.37-2.23)

SVD=Spontaneous Vaginal Delivery

labour included gestational diabetes (14%), post term pregnancies (12%) and small for gestational age fetuses (6%).

Immediate complications were reported in 10(4.3%) patients. These complications included perineal tears, postpartum haemorrhage and extended episiotomy. Early complications including wound infection, gaping wound and resuturing of wound were reported in 21(8.9%) patients.

Table-2 shows factors associated with episiotomy complications. Multivariate analysis, showed age to be significantly associated with complications. Rest of the factors were not significant.

Out of 235 patients, 136(58%) received oral antibiotics for 3 to 5 days post-delivery whereas 32 patients received antibiotics at their first postnatal visits.

Rate of episiotomy varies in different hospitals. In our hospital it was 78% which is less as compared to Khani et al.<sup>7</sup> They reported the prevalence of 97.3% in all, 63% of the study patients, were in the age group of 19-29 years and 77% had BMI > 25.

Episiotomy has been reportedly associated with third and fourth degree perineal tears, more common with midline episiotomy. But in our study no third or fourth degree tear was seen may be because all the episiotomies were mediolateral.

Pain after episiotomy is a common complaint and is usually controlled with oral analgesics. Our patients received Diclofenac Sodium for one week postpartum. Those patients who still had pain in their first followup visit received pain killer for one more week.

Urinary retention is a known complication after normal and particularly after instrumental deliveries. If not managed timely may result in urinary tract infections, prolonged voiding difficulties, rarely renal failure and life threatening emergencies.<sup>7,8</sup> In our study urinary retention was seen in one patient who had instrumental delivery. Urinary tract infection was seen in 3 patients that were managed with oral antibiotics.

Incidence of episiotomy wound infection varies in different countries and institutes and has significant physical, psychological and social implication. An audit conducted in Lancashire Teaching Hospital England reported the incidence of 8% after normal deliveries and 48% after instrumental deliveries.<sup>9</sup> Another study by Johnson A reported it to be 11%.<sup>10</sup> Wound infection in our study was seen in 0.04% of cases. This could be due to effective infection control practices and use of empirical antibiotics.

## Conclusion

Mediolateral episiotomy is not associated with increased incidence of complications and can be a safe obstetrical surgical procedure in order to prevent third and fourth degree perineal tears.

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**Conflict of Interest:** None.

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## References

- Naidu M, Kapoor DS, Evans S, Vinayakarao L, Thakar R, Sultan AH. Cutting an episiotomy at 60 degrees: how good are we? *Int Urogynecol J* 2015; 26: 813-6.
- Stedenfeldt M, Pirhonen J, Blix E, Wilsgaard T, Vonon B, Øian P. Anal incontinence, urinary incontinence and sexual problems in primiparous women—a comparison between women with episiotomy only and women with episiotomy and obstetric anal sphincter injury. *BMC Women's Health* 2014; 14: 157.

3. Fernandes S, Benjamin EE, Edwards G. Using evidence to reduce the rate of episiotomy in a Dubai hospital. *Evidence-based Midwifery* 2009; 7: 60-3.
  4. Fodstad K, Laine K, Staff AC. Different episiotomy techniques, postpartum perineal pain, and blood loss: an observational study. *Int Urogynecol J* 2013; 24: 865-72.
  5. McDonald E, Gartland D, Small R, Brown S. Dyspareunia and childbirth: a prospective cohort study. *BJOG* 2015; 122: 672-9.
  6. Lwanga SK, Lemeshow S, World Health Organization. Sample size determination in health studies: a practical manual. World Health Organization; 1991.
  7. Khani S, Zare K, Ramezannezhad S. The Frequency of Episiotomy and Its Related Factors. *Iran J Nurs* 2012; 24: 45-52.
  8. Baheti VH, Wagaskar VG, Patwardhan SK. Missed Iatrogenic Bladder Rupture Following Normal Vaginal Delivery. *J Clin Diagn Res* 2015; 9: PD01-PD02.
  9. Mulder FE, Rengerink KO, van der Post JA, Hakvoort RA, Roovers JP. Delivery-related risk factors for covert postpartum urinary retention after vaginal delivery. *Int Urogynecol J* 2016; 27: 55-60.
  10. Ridley N. Perineal wound infections: an audit. *The Practicing Midwife* 2015; 18.
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