

## The practice of episiotomy in a university teaching hospital in Nigeria: How satisfactory?

Inyang-Etoh E.C\*, Umoiyoho A.J

Department of Obstetrics and Gynaecology, University of Uyo, Uyo, Akwa Ibom state, Nigeria.

\*Corresponding Author: emmacol2000@yahoo.com

### ABSTRACT

**Background:** Episiotomy is essentially a surgical procedure but it is often relegated to the least experienced member of the obstetric team with possible untoward consequences to the mother. **Aim:** This study set out to appraise how episiotomy was practiced in the University of Calabar Teaching Hospital during the period of the study. **Materials and Methods:** It was a cross sectional exploratory study which assessed episiotomy and episiorrhaphy procedures among parturients in the centre. **Results:** Thirty two percent of the 275 parturients studied did not know what episiotomy means. The majority (61.5%) of the parturients were not counseled on the need for episiotomy before the procedure was performed on them. The mean delivery-repair interval for episiotomy among parturients in the study population was  $17.9 \pm 5.66$  minutes. Most (75.6%) of the episiotomies were performed by midwives. A significant proportion (45.8%) of the parturients had episiotomy performed on them without prior administration of local anaesthesia. The majority (52.7%) of the episiotomies were repaired by house officers. Common complications among women in the study population were perineal discomfort, perineal pain and difficulty in breastfeeding. **Conclusion:** The practice of episiotomy in the studied University Teaching Hospital during the period of the study did not meet all necessary requirements of a surgical procedure. Senior members of the obstetric team should supervise the practice in order to ensure the maintenance of standard.

**Key words:** Episiotomy, episiorrhaphy, surgical procedure, practice, counseling

### INTRODUCTION

Episiotomy is the commonest surgical procedure in obstetric practice only second to the cutting of the umbilical cord at delivery. The practice of episiotomy has undergone a number of reviews starting from the 1920s when routine episiotomy was advocated to the 1980s when restrictive use of episiotomy became the recommended practice.<sup>[1]</sup> The incidence of episiotomy ranges from 20.0% to 62.5% worldwide with a wide inter-centre variation.<sup>[2,3]</sup> In Nigeria, the incidence of episiotomy ranges from 20.8% to 54.9%.<sup>[4,5]</sup> The following benefits were traditionally ascribed to routine

episiotomy: reduction of severe perineal laceration, reduction of fetal trauma, reduction of urinary stress incontinence and improved wound healing.<sup>[1]</sup> Thacker and Banta<sup>[1]</sup> in 1993 however, found that most of these acclaimed benefits lacked scientific basis. They discovered in their study that episiotomy was associated with more pain, excessive bleeding, wound hematoma, wound infection and wound breakdown.<sup>[2,6]</sup> Thacker and Banta therefore advocated restrictive use of episiotomy. Their findings were later corroborated by other workers who confirmed the need for restrictive use of episiotomy.<sup>[2,6]</sup>

This evidence has led to a decline in the incidence of episiotomy in many maternity centers around the world.<sup>[5,7]</sup> Nonetheless, episiotomy which is essentially a surgical procedure is generally associated with complications, some of which include pain, hemorrhage, local anesthetic toxicity, wound infection and wound breakdown.<sup>[8,9]</sup> The occurrence of these complications may be influenced by the skill and experience of the attending physician. Episiotomy also interferes with the mother's comfort during the postpartum period. The fear of episiotomy by women in our environment has also been adduced as one of the reasons why some women receive antenatal care in hospitals but elect to deliver in unlicensed maternity homes where episiotomies are never performed and intrapartum care may be inadequate.<sup>[8,10]</sup>

Published literature on episiotomy as it is practiced in maternity units around the world are generally sparse; however, anecdotal evidence suggests that in most maternity centers, the repair of episiotomy is often relegated to the inexperienced house officer with attendant adverse consequences to the mother. This study seeks to appraise how episiotomy was practiced in the University of Calabar Teaching Hospital. It is envisaged that the findings of this study would help us bring to the fore the need for review of our practice and/or reinforce our current practice as regards episiotomy.

## MATERIALS AND METHODS

### Study design and study area

This was a cross-sectional exploratory study that was conducted at the maternity annex of the University Calabar Teaching Hospital over a twelve month period to appraise how episiotomy was performed and repaired in the center. The University of Calabar Teaching Hospital is located in Calabar, the state capital of Cross River State, which is located in the south-south geopolitical zone of Nigeria. The University of Calabar Teaching Hospital is the only tertiary health facility that provides specialist maternity care to women in the state and its environ. Calabar has an estimated population of 328,876 people, 50% of which are women. (Final Report of the Nigerian national population census- 2006)

### Recruitment and data collection

Following approval from the ethical committee of the hospital, all the parturients who had episiotomy and gave their informed consent to participate in the study were recruited into the study. The questionnaires which were partly pre-coded and

partly open-ended were pretested and administered to each parturient within 24 hours postpartum to assess how episiotomy was performed and repaired. Additional information on the parturients' demographics were abstracted from the delivery notes and attending personnel were also interviewed on counseling of the parturients before the procedure, the use of local anaesthesia, the interval between delivery and repair of the episiotomy and the problems encountered in the course of repair of the episiotomy.

### Statistical analysis

The data obtained were presented as numericals, simple proportions, and percentages. Mathematical calculations were done using conventional statistical formulas and the results were presented in tabular form. Descriptive and inferential principles were used to draw conclusions from the study.

## RESULTS

During the 12 months period of the study, 1306 women were delivered vaginally in the maternity annex of the University of Calabar Teaching Hospital out of which 275 had episiotomy performed on them. This gave an incidence of episiotomy of 21.0% during the period of the study. Out of the 275 parturients, 260 (94.5%) were booked, 10 (3.6%) were unbooked and 5 (1.8%) of the parturients were referred from other health facilities.

Table 1 shows the knowledge status of parturients in the study population. The majority (61.0%) of the parturients had knowledge of what episiotomy means when they were interviewed while eighty-eight (32.0%) of the parturients did not know what episiotomy means. Nineteen women were not sure whether they knew what episiotomy means or not.

**Table 1: Knowledge about episiotomy before labour**

Knowledge status	No of parturients (%)
Had knowledge	168(61.0)
Had no knowledge	88(32.0)
Cannot remember	19(7.0)
Total	275(100.0)

The distribution of women according to their counseling status is shown in table 2. The majority (61.5%) of the women who had episiotomy performed on them were not counseled about the procedure. Only 97 (35.2%) of the parturients were

duly counseled before the episiotomy were performed on them.

**Table 2: Counseling before episiotomy was performed**

Counseling status	No. of parturients (%)
Counseled	97(35.2)
Cannot remember	169(61.5)
Cannot remember	9(3.3)
Total	275(100.0)

Table 3 shows the interval from delivery to repair of the episiotomy in the study population. A total of 169 (61.4%) women had their episiotomy repaired within 15 minutes after delivery. The episiotomies of forty-nine (17.8%) of the women were repaired between 15 and 30 minutes after delivery. The rest (20.8%) had their repair delayed longer than 30 minutes. Two of the parturients were delayed for about 2 hours because of lack of sterile instruments for the repair. The mean delivery-repair interval was  $17.9 \pm 5.66$  minutes.

**Table 3: Interval from delivery to repair of the episiotomy**

Interval (min)	No. of parturients (%)
0 – 15	169(61.4)
15 – 30	49(17.8)
30 – 45	36(13.2)
45 – 60	13(4.7)
>60	8(2.9)
Total	275 (100.0)

The designation of staff that performed the episiotomy on parturients in the study population is shown in table 4. Only seventeen (6.1%) of the women had their episiotomy performed by either a consultant or senior Registrar. A vast majority (75.6%) of the episiotomies were performed by midwives.

Table 5 shows the proportion of women whom local anesthesia were administered before episiotomy. As many as one hundred and twenty-six (45.8%) of the women were not on local anesthesia before episiotomy were performed on them. The ranks of the doctors who repaired the episiotomy among women in the study population are shown in table 6. One hundred and forty-five (52.7%) women had their episiotomy repaired by House officers whereas only 9.9% of women had theirs repaired by either a Senior Registrar or a Consultant.

**Table 4: Designation of the staff who performed the episiotomy**

Designation	No of parturients (%)
Consultant	8(2.9)
Senior Registrar	9(3.2)
Registrar	50(18.3)
Midwife	208(75.6)
Total	275(100.0)

**Table 5: Administration of local anaesthesia before episiotomy**

Local anaesthesia status	No of parturients (%)
Administered	149(54.2)
Not administered	126(45.8)
Total	275(100.0)

**Table 6: Rank of the Doctors who repaired the episiotomy**

Rank	No of parturients (%)
Consultant	12(4.4)
Senior Registrar	15(5.5)
Registrar	103(37.4)
House officer	145(52.7)
Total	275(100.0)

Table 7 shows the different complications that occurred among women in the study population. The commonest complication was perineal discomfort, which occurred in 81(29.5%) of the women. The least complication was perineal bleeding which occurred in only 4.7% of the women.

**Table 7: Complications resulting from episiotomy**

Complications	No of parturients (%)
Perineal discomfort	81(29.5)
Perineal pain	69(25.1)
Difficulty with breastfeeding	49(17.8)
Difficulty with walking	40(14.5)
Perineal bleeding	13(4.7)

## DISCUSSION

The review of clinical and surgical practices in every clinical unit is desirable so that aberrant practices could be detected and efforts made to correct them in the overall interest of the patients whom we serve. The prevalence of episiotomy among women in the center during the period of the study was 21.0%. This was at the lower limit of the estimated range from Nigerian centers which revealed a rate of 20.8% – 54.9%.<sup>[4,5]</sup> Although relatively low by Nigerian standard, this prevalence still fell short of the recommended episiotomy rate of less than 15% advocated by restrictive episiotomy activists.<sup>[6]</sup> A comparable episiotomy rate of 24.8% was also obtained at Jos, Nigeria.<sup>[5]</sup> This result however contrasted with relatively high episiotomy rates of 54.9%, 40.4% and 46.6% obtained at other Nigerian centers namely: Lagos, Enugu and Benin respectively.<sup>[4,11,12]</sup> Although, the reason for this disparity in episiotomy rates among centers has not been adduced, restrictive use of episiotomy is said to be a goal that is achievable in every maternity unit.

Merely 61% of the parturients in the study population knew what episiotomy means at the time they were admitted in labor. The proportion of the women that knew what episiotomy means was modest considering the fact that most (94.5%) of the parturients had booked and received antenatal care in the center. Antenatal clinic in the centre provides an avenue where health-talks are given to attending women on episiotomy and other procedures that may be needed in the course of pregnancy and delivery. This rather surprising finding unfolds some defects in our antenatal care in the centre.

Only ninety-seven (35.2%) parturients were counseled on the need for episiotomy before the procedure was performed on them. This finding was disturbing because this type of practice does not recognize the fact that episiotomy is essentially a surgical procedure. Informed consent is required prior to any clinical or surgical procedure and this requirement should be met before any such procedure is performed.<sup>[13]</sup>

Only 61.4% of the parturients had their episiotomy repaired within 15minutes from delivery in the study population. It seems reasonable for episiotomies to be repaired immediately; however, a short interval may be needed to get the patient ready and this should ideally not exceed fifteen minutes. Any further delay may be unreasonable as the risk of

bleeding, wound contamination and infection increases as the delivery-repair interval is prolonged. Surprisingly, up to 38.6% of the episiotomies were not repaired within 15minutes interval in the center. Interestingly, a study in Zaria revealed a mean delivery-repair interval of 60.5minutes due largely to inadequate episiotomy-repair packs in the centre; this contrasted with the significantly shorter delivery-repair interval of 17.9minutes obtained in our study.<sup>[8]</sup>

A vast majority (75.6%) of the episiotomies were performed by midwives. This was not surprising because most vaginal deliveries in the center are conducted by midwives except when there is an identified risk factor warranting the attention of the doctor. Only 6.1% of the parturients had their episiotomy performed by a consultant or senior registrar. This finding is a reflection of the practice in our centre where senior members of the obstetric team are only sparingly invited to conduct high risk deliveries.

About 54.2% of the parturients had local anaesthesia administered before episiotomy was performed on them. A study in a Teaching Hospital in Ethiopia revealed a much lower rate of 28.1% of local anesthesia use among parturients who had episiotomy in their study.<sup>[14]</sup> This practice, which is not recommended can be traced back to the 1970s when vaginal delivery was regarded as a natural process requiring no interference. Anecdotal evidence holds that midwives were then indoctrinated to cut at the peak of uterine contractions when pain is maximal with the hope that the ischemic pain of uterine contractions would mask the pain of the episiotomy. This practice of performing episiotomy without anesthesia is cruel and should be abandoned in all maternity units. Episiotomy which is essentially a surgical procedure requires adherence to basic surgical principles and so, adequate anesthesia must precede the procedure.<sup>[15]</sup> The correction of this aberrant practice calls for training and retraining of nurses on modern midwifery practices.

The majority (52.7%) of the episiotomies were repaired by house officers. This finding has confirmed the suspicion that episiotomy is often relegated to house officers. This practice must be checked if satisfactory results are to be expected from the management of episiotomy. Nonetheless, House Officers can repair episiotomy satisfactorily if they are adequately trained. Such training should follow the principle of initial observation, assisting, repairing under direct supervision and repairing

under indirect supervision before he or she is allowed to repair unsupervised.

The commonest (29.5%) complication of episiotomy among mothers in the study population was perineal discomfort. This was not surprising as most patients who had surgical procedures would complain of some discomfort at the site of the operation. However, perineal pain occurred in 25.1% of mothers either because of inadequacy of anesthesia, failure of postoperative analgesia or inappropriate surgical technique. Such determinants may be influenced by the skill and experience of the surgeon.

In conclusion, the practice of episiotomy in the studied University Teaching Hospital during the period of the study did not meet the minimal requirements of a surgical procedure. Senior members of the obstetric team should supervise the practice to ensure standard. The provision of pre-packed episiotomy-repair packs would go a long way in the reduction of delivery-repair interval.

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