

Research Article

Is Rectal Analgesia a Better Choice for Post Episiotomy Pain? - An Interventional Study

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A B S T R A C T

Background: Post episiotomy pain is accompanied by discomforts while walking, sitting and even while squatting. Managing the perineal pain is essential for a smooth transition into motherhood for any parous women. Many non-pharmacological remedies exist and are practiced yet use of analgesics are the first line of management to relieve pain.

Purpose: This study aimed to evaluate the effectiveness of rectal analgesic suppository among the interventional group (n=15) and the control group (n=15) with routine oral analgesics among primipara woman. Quantitative Approach using Posttest with control group design was used. Simple random sampling was done for randomization of samples.

Result: The study found that there was a significant reduction in pain among the rectal analgesia group when compared to the oral analgesic groups. The post-test pain scores were significantly lower in the experimental group than the control group. It was also observed that there were lesser discomforts experienced while doing their activities of daily living including breastfeeding the baby in sitting position among primipara women in the interventional group than the primipara women in the control group.

Conclusion: Using rectal analgesics for post episiotomy pain is safe and comfortable and helps manage pain better and should be included in the hospital's pain management protocol for pain relief immediately post episiotomy.

Keywords: Episiotomy, Perineal Pain, Analgesics, Suppositories, Primipara

Introduction

Post episiotomy pain is in par with cesarean section pain with postpartum women reporting an extended pain until 6 months after delivery if undergone an assisted instrumental delivery.¹ An episiotomy is a planned surgical intervention under local anesthetic infiltration which is made on the

perineal muscles to enlarge the area and aid in the delivery process. It is an incision that is made on the posterior vaginal wall especially when "Crowning" of the fetal head occurs.^{2,3} As the incision is either made using a scalpel or episiotomy scissors it is considered to be clean wound and performing a mediolateral episiotomy was believed

to have faster healing and lesser pain when compared to the perineal tear, though now the case is not the same.⁴ A research studied the predictors of routine episiotomy for primigravida women in which more than 50 percent of the respondents felt it is safe for primigravida women, fastens second stage of labor and prevents third- and fourth-degree perineal tear.⁵ Around 50 percent of women have anal sphincter injury after an episiotomy repair.^{6,7}

The use of episiotomy continues to be higher in developing countries than developed countries like Australia, Canada, and Sweden.⁸ A survey was conducted across the Global Network for Women's and Children's Health Research sites in 2003 among eleven developing countries which included India. The survey published findings that the overall rate of routine use of episiotomy is 40 percent but when considered in primigravida it was 90 percent.⁹ The wide practice of episiotomy still exists in Asian countries and the reason is mainly attributed to the short and rigid perineal tissues of the Asian women. Hence almost 90 percent of first-time pregnant woman undergo an episiotomy by a forced choice.¹⁰

Perineal Pain is associated with episiotomy is considered as the most common complaint among the immediate postpartum women. A research paper describes the characteristics of perineal pain experienced by a primiparous woman. The pain intensity measured using the numerical rating scale and most women rated the pain score to be 8 out of 10 and a minimum score to be 1 which explains that pain experienced may be moderate to severe based on the pain tolerance as it is subjective. The characteristics of pain measured using the Brazilian version of the McGill questionnaire (Br-MPQ) described it using words like a sore, hurting, discomfort, annoying, burning, throbbing and pressing.¹¹

Primigravida woman waits in anticipation for her labor and delivery, it is an overnight transition to the new role of motherhood. She is expected to quickly adjust and bear with her physical discomforts of childbirth and participate in the newborn care and nutrition especially breastfeeding. Most mothers report perineal pain as a stressor which interferes with their urination and defecation pattern as well as hinders in ably performing their maternal responsibilities to the newborn.¹²

Pain is considered as the fifth vital sign in conjunction with temperature, pulse, respiration and blood pressure. Pain also affects the quality of life through its effect on things such as mood, activity, appetite, hygiene and the ability to focus and concentrate.¹³ One such pain is the post episiotomy pain which is highly sensitive and affects women's various activities like difficulty to sit and feed baby, squatting to micturate and defecate and ambulate.¹⁴

There a lot of research that proved nonpharmacological

methods of pain relief and healing properties like the lavender oil, infrared therapy, cooling gel, chamomile ointment, acupuncture.¹⁵⁻¹⁹ Though there are a variety of nonpharmacological methods, they are recommended for practice only in addition to the prescribed pharmacological treatment.²⁰ Most obstetricians prescribe oral analgesics for perineal pain. Women are less compliant with oral analgesics as they are breastfeeding.²¹

Significance of Study

A randomized control trial was conducted at the Holy Family Hospital, Rawalpindi to compare the efficacy of rectally administered Diclofenac sodium with orally administered Mefenamic acid for relief of perineal pain associated with childbirth. About 324 women participated in the study. They were randomly allocated into 2 groups of 162 each. The treatment packs contained two 50 mg Diclofenac suppositories or Mefenamic acid tablets 500 mg. In group A the first suppository was kept immediately after suturing and the next one after 12 hours. In group B, Mefenamic acid tablets were given 8th hourly. McGill Pain Questionnaire was used to assess the intensity of pain. It was noted that there was a statistically significant difference between the two groups. Pain scores were lower in the Diclofenac suppository group when compared to Mefenamic Group. The administration of Diclofenac gives relief from pain effectively compared to the oral tablet.²¹

There is more concern with pain occurring during labor, delivery and after a cesarean section. Perineal pain after vaginal delivery and after episiotomy is often a self-recovery phase with minimal assistance from health care professionals.²² Pain after episiotomy has been reported as one of the most common maternal morbidities in the postpartum period. The researchers in this study have tried to measure the effect of rectal analgesic suppositories in comparison with the oral analgesics.

Objectives of the Study

- To assess the pain score between the interventional group and the control group using the Numerical Pain Rating Scale.
- To assess the condition of the episiotomy wound with pain using the REEDA Scale.
- To assess pain using a pain management record to rate pain scores while at rest, sleep and activities.
- To recommend the integration of the use of Rectal analgesics as a Medication order in the Acute Postpartum Pain Management Guidelines.

Materials and Methods

A quantitative research approach was used. An experimental study with randomization using Posttest with control group design was done. This study was the result of a test for developing a Medication Order and integrating it into the

Acute Postpartum Pain Management Guidelines across hospitals in Tamilnadu.

The study was done between June 2012 -13 at the 20 bedded postnatal wards in the Government Sait Memorial Hospital (Maternity wing), Ootacamund, Tamilnadu, India. It is a part of Ooty's Government Head Quarters Hospital which dates back to the period of the British rule and has celebrated its 150 years of establishment. The maternity wing has 116 beds and three labor rooms. An episiotomy is a restrictive procedure in India, a fully specialized maternity hospital was chosen. The criteria for selecting the setting were the feasibility of conducting the study, availability of adequate samples with the episiotomy procedure, permission to allow rectal administration of Analgesics and staff cooperation towards conducting the research study.

Simple Random Sampling was done. Using Mahajan's formula, the sample size of 30 Mothers (15 in the experimental group, 15 in the control Group) was calculated with reference to available statistics of episiotomy performed over a year. The samples included in the study were restricted to Primipara Women who underwent episiotomy for various indications. The study was a partial requirement of research for the completion of the Master's in Obstetrical and Gynecological Nursing hence a limited sample size was considered.

Inclusion Criteria

The following women were included.

- Primipara woman aged 20 and above and who have undergone episiotomy.
- The woman who complains of postpartum perineal pain and discomfort.
- Those who are willing to participate in this study.

Exclusion Criteria

The following women were excluded.

- Primipara woman who is known case of sensitivity to Diclofenac components.
- Woman having a history of GI Ulcers or Bleeding as the drug may exaggerate the symptoms.
- Women with a known cause of renal diseases.
- A woman who declined to use a suppository.
- Women who are on other NSAIDs.

Ethical Clearance

The proposal passed through various phases of review by nursing experts as well as Obstetricians. The Institutional Review Board granted the ethical clearance with a recommendation to include the practicing obstetrician at the setting Government Sait Memorial Hospital (Maternity Wing), to be the Co-supervisor of this research.

Research Tool

The researchers used the Numerical Rating Scale to assess

the intensity of the pain after the drug administration. NRS is a standardized tool popularly used. The REEDA Scale was used to assess the condition of the perineal wound. REEDA is used to assess the Redness, Ecchymosis, Edema, Discharges, and Approximation of sutures. The psychometric analysis of this proves that the scale is reliable by measuring the inter rater reliability with the kappa Coefficient range between 0.66 and 0.88 was identified with different parameters measured.²² A pain management record was also developed by the researcher to record the pain scores at rest, movement, and sleep. It also recorded pain during activities like breastfeeding and newborn care.

Data Collection

The data collection process began by identifying the sample that met the inclusion criteria. The primigravida woman was randomly allocated to the interventional and control group. For achieving randomization, the flipping of a coin was done, the showing up of the head of the coin was in the interventional group and the tail was in the control group. Though the randomization was done, the women were asked their willingness to participate in the interventional group. The prescription for the medication was made and ordered in the system by the Obstetrician as Diclofenac Suppository 75 mg BD for 2 days and PRN dose for the 3rd day. The control group followed the routine oral NSAIDs prescribed BD which was paracetamol 500 mg. Informed consent was obtained after explaining the purpose of the research and the method of administering the drug rectally. The researchers waited post-delivery until the patient verbalized pain and asked for the pain relief medication as the patients received a perineal infiltration of lidocaine 1% around 15 mL as a local anesthetic agent before the perineal incision. Lidocaine 1% is a short-acting anesthetic medication had a period of numbness between 45-60 minutes. The first dose of Diclofenac suppository 75 mg was administered rectally after one hour of the delivery. The same was with the case of the Tablet Paracetamol 500 mg for the control group. The pain assessment using the Numerical Pain Rating Scale was done after 45 minutes of administration of the drugs.

Data Analysis

The data was entered using an excel sheet Descriptive statistics were used to describe the demographic variables. Inferential statistics like Independent t-test was done and the post-test pain scores were compared between the groups.

Result

Socio-Demographic Data

The mean age of the woman who participated in the study was 27.72% were 27 years, 3% was 25 years, 15% were between 21 to 23 years and 10 percent was age 20. All participating women had a minimum of primary school education. 55 percent of women are housewives and 45

percent are employed in different jobs as teachers, tailors, clerks, and beauticians.

Obstetrical Data

Out of 30 primipara women, 27 underwent normal vaginal delivery, 3 underwent forceps delivery. All had Mediolateral episiotomy with the indication being inelastic perineum as mediolateral episiotomy either on the left or the right side was the routine practice in the unit.

The post-test mean pain score (1.01) on the third postnatal day in the experimental group was lower than the posttest mean pain score (4.3) in the control group showing a significant reduction in the post episiotomy pain in the rectal analgesia group (Figure 1).

Comparison between the Pain Scores

As depicted in Figure 1, the independent ‘t’ test showed that the post-test pain scores were significantly lower in the experimental group than the control group. The calculated values were greater than the tabulated value (2.060) and significant at $p < 0.05$.

Assessment of Episiotomy Wound

There were no reported signs of infection on the episiotomy wound in both groups. The assessment was done using the REEDA scale.

Pain Management Record

The following were the reports on the pain management records.

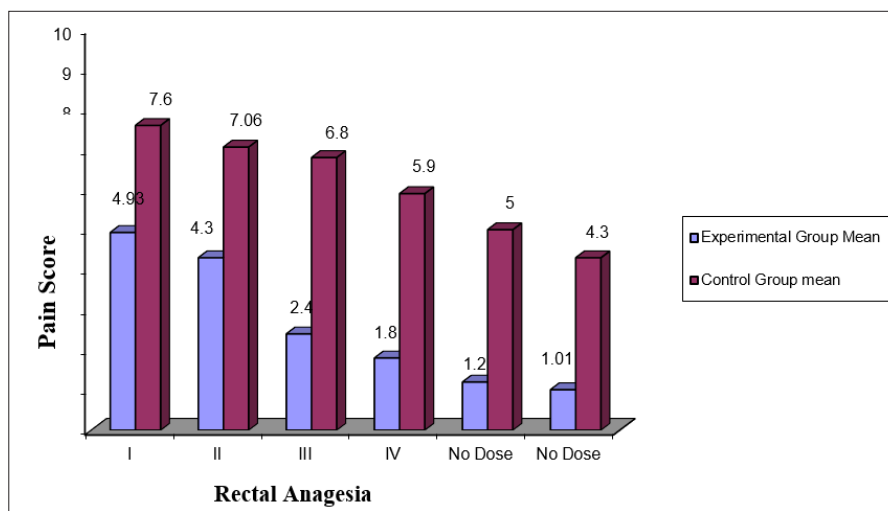


Figure 1. Post-episiotomy pain scores

Table 1. Summary of the interventional group (using rectal analgesics)

Pain scores on 3 rd day of hospital stay			Ability to perform activities		
At rest	During movement	While sleeping	Breastfeeding	Self-care activities	Baby care activities
11 women reported no pain. 4 reported mild pain.	13 reported mild pain and 2 reported moderate pain.	10 reported No pain. 2 reported mild pain. 3 verbalized unable to recollect.	All 15 were able to comfortably feed in sitting position.	All were able to perform their self-care.	All were able to perform baby care.

Table 2. Summary of the control group (using oral analgesics)

Pain scores on 3 rd day of hospital stay			Ability to perform activities		
At rest	During movement	At rest	During movement	At rest	During movement
5 women reported no pain. 7 reported mild pain. 3 reported moderate pain.	11 reported moderate pain and 4 reported severe pain.	2 reported mild pain. 11 reported moderate pain. 3 verbalized unable to sleep.	All 15 were able to feed in the sitting position but experienced perineal discomfort.	All were able to perform their self-care except experiencing pain while squatting for toileting.	All were able to perform baby care.

Discussion

In this study a decline in pain scores were observed at the fourth dose as against a study reported the effectiveness of a single dose administration of diclofenac rectal suppository in a total of 200 women who had a Medio lateral episiotomy or a perineal laceration and compared the pain scores with a group receiving indomethacin suppositories. The pain was recorded using a 10 cm VAS scale. There was a significant pain reduction in the diclofenac suppository group.²³ A similar study was conducted on 70 samples who had a right Medio lateral episiotomy with the same diclofenac and indomethacin suppositories. Though both the suppositories showed a reduction in pain still diclofenac was better effective.²⁴

The findings of this study also emerged with the use of suppositories the postpartum women were able to perform activities of daily living also supported by a similar research which studied the effectiveness of Diclofenac over Anusol with 133 women who had a second-degree tear or episiotomy. McGill Questionnaire pain questionnaire was used to record the characteristics of pain. The women in the diclofenac group experienced lesser pain and discomfort during activities like walking, sitting and passing urine and stools.²⁵ A review of evidence assessed the studies that used rectal diclofenac suppositories. Most of the studies reported diclofenac as an effective pain manager until the first 24 hours and most often no added analgesia was asked by the patient.²⁶ while in our study most participant demanded doses for the first forty-eight hours.

Recommendations

The effectiveness of diclofenac rectal analgesic usage in treating post episiotomy pain or perineal pain makes it recommendable to be used as a medication order for the acute postpartum pain management guidelines of Maternity units.

Conclusion

The sample size is a limitation for generalizability of the findings of this study, it is recommended to undertake a larger sample size. Yet with the findings of this study and its supporting literature, Rectal suppositories could be a safe, cost-effective alternative pain management method.

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Conflict of Interest: None

References

1. Declercq E, Cunningham D, Johnson C et al. mothers' reports of postpartum pain associated with vaginal and cesarean deliveries: results of a national survey. *Birth* 2008; 35(1): 16-24. Available from: <http://www.gr8birth.com/cesarean/18.pdf> [DOI: 10.1111/j.1523-536x.2007.00207.x/ PubMed/ Google Scholar/ ResearchGate].
2. Kalis V, Landsmanova J, Bednarova B et al. Evaluation of the incision angle of mediolateral episiotomy at 60 degrees. *International Journal of Gynecology & Obstetrics* 2011; 112(3): 220-224. Available from: <https://obgyn.onlinelibrary.wiley.com/doi/abs/10.1016/j.ijgo.2010.09.015> [DOI: <https://doi.org/10.1016/j.ijgo.2010.09.015/> PubMed/ Google Scholar/ ResearchGate].
3. Kalis V, Laine K, de Leeuw J et al. Classification of episiotomy: towards a standardization of terminology. *BJOG: An International Journal of Obstetrics & Gynaecology* 2012; 119(5): 522-526. Available from: <https://obgyn.onlinelibrary.wiley.com/doi/full/10.1111/j.1471-0528.2011.03268.x> [DOI: 10.1111/j.1471-0528.2011.03268.x/ PubMed/ Google Scholar].
4. Karbanova J, Rusavy Z, Betincova L et al. Clinical evaluation of early postpartum pain and healing outcomes after mediolateral versus lateral episiotomy. *International Journal of Gynecology & Obstetrics* 2014; 127(2): 152-156. Available from: <http://www.komora-primalja.hr/datoteke/Karbanova%20J%202014%20Clinical%20evaluation%20of%20early%20postpartum%20pain%20and%20%20healing%20outcomesg.pdf> [DOI: 10.1016/j.ijgo.2014.05.025. / PubMed/ Google Scholar].
5. Al-Ghammari K, Al-Riyami Z, Al-Moqbali M et al. Predictors of routine episiotomy in primigravida women in Oman. *Applied Nursing Research* 2016; 29: 131-135. Available from: <https://www.sciencedirect.com/science/article/pii/S0897189715001007?via%3Dihub> [DOI: <https://doi.org/10.1016/j.apnr.2015.05.002/> PubMed/ Google Scholar/ ResearchGate].
6. Hartmann K, Viswanathan M, Palmieri R et al. Outcomes of routine episiotomy: a systematic review. *JAMA* 2005; 293(17): 2141. Available from: <https://jamanetwork.com/journals/jama/fullarticle/200799> [DOI: <https://doi.org/10.1001/jama.293.17.2141/> PubMed/ Google Scholar/ Researchgate].
7. Norderval S, Nsubuga D, Bjelke C et al. Anal incontinence after obstetric sphincter tears: incidence in a Norwegian

- county. *Acta Obstetrica Et Gynecologica Scandinavica* 2004; 83(10): 989-994. Available from: [DOI: <https://doi.org/10.1111/j.0001-6349.2004.00647.x>/ PubMed/ Google Scholar/ ResearchGate].
8. Sioutis D, Thakar R, Sultan A. Overdiagnosis and rising rate of Obstetric Anal Sphincter Injuries (OASIS): time for reappraisal. *Ultrasound in Obstetrics & Gynecology* 2017; 50(5): 642-647. Available from: <https://obgyn.onlinelibrary.wiley.com/doi/pdf/10.1002/uog.17306> [PubMed/ Google Scholar].
 9. Clesse C, Lighezzolo-Alnot J, De Lavergne S et al. Statistical trends of episiotomy around the world: Comparative systematic review of changing practices. *Health Care for Women International* 2018; 39(6): 644-662. Available from: <https://www.tandfonline.com/doi/abs/10.1080/07399332.2018.1445253> [DOI: <https://doi.org/10.1080/07399332.2018.1445253>/ PubMed/ Google Scholar/ ResearchGate].
 10. Kropp N, Hartwell T, Althabe F. Episiotomy rates from eleven developing countries. *International Journal of Gynecology & Obstetrics* 2005; 91(2): 157-159. Available from: <https://obgyn.onlinelibrary.wiley.com/doi/abs/10.1016/j.ijgo.2005.07.013> [DOI: <https://doi.org/10.1016/j.ijgo.2005.07.013>/ PubMed/ Google Scholar/ ResearchGate].
 11. Pitangui AC, de Sousa L, Gomes FA et al. High-frequency TENS in post-episiotomy pain relief in primiparous puerpere: A randomized, controlled trial. *Journal of Obstetrics and Gynaecology Research* 2012; 38(7): 980-987. Available from: https://s3.amazonaws.com/academia.edu.documents/43371011/High-frequency_TENS_in_post-episiotomy_p20160304-17431-1e4ltzx.pdf?response-content-disposition=inline%3B%20filename%3DHigh-frequency_TENS_in_post-episiotomy_p.pdf&X-Amz-Algorithm=AWS4-HMAC-SHA256&X-Amz-Credential=AKIAIWOWYYGZ2Y53UL3A%2F20191112%2Fus-east-1%2Fs3%2Faws4_request&X-Amz-Date=20191112T103322Z&X-Amz-Expires=3600&X-Amz-SignedHeaders=host&X-Amz-Signature=b82caced267441c12fc7faf91c9585d6a7e22f3789573d12560ed45776f504ff [DOI: <https://doi.org/10.1111/j.1447-0756.2011.01824.x>/ PubMed/ Google Scholar].
 12. Dutra L, Araújo A, Micussi M. Non-pharmacological therapies for postpartum analgesia: a systematic review. *Brazilian Journal of Pain* 2019; 2(1): 72-80. Available from: <http://www.scielo.br/pdf/brjp/v2n1/2595-0118-brjp-02-01-0072.pdf> [Google Scholar].
 13. Campbell JN. The fifth vital sign revisited. *Pain* 2016; 157(1): 3-4. [PubMed/ Google Scholar].
 14. East C, Sherburn M, Nagle C et al. Perineal pain following childbirth: Prevalence, effects on postnatal recovery and analgesia usage. *Midwifery* 2012; 28(1): 93-97. Available from: https://s3.amazonaws.com/academia.edu.documents/47096504/j.midw.2010.11.00920160707-1677-rdmagg.pdf?response-content-disposition=inline%3B%20filename%3DPerineal_pain_following_childbirth_Preva.pdf&X-Amz-Algorithm=AWS4-HMAC-SHA256&X-Amz-Credential=AKIAIWOWYYGZ2Y53UL3A%2F20191112%2Fus-east-1%2Fs3%2Faws4_request&X-Amz-Date=20191112T111828Z&X-Amz-Expires=3600&X-Amz-SignedHeaders=host&X-Amz-Signature=ad0cde4d6eab6ec96844909b2654663a3c411d22dfe891fa42f1cfe0b642f426 [PubMed/ Google Scholar].
 15. Sheikhan F, Jahdi F, Khoei E et al. Episiotomy pain relief: Use of Lavender oil essence in primiparous Iranian women. *Complementary Therapies in Clinical Practice* 2012; 18(1): 66-70. Available from: https://s3.amazonaws.com/academia.edu.documents/58422773/maternitas_lavender1.pdf?response-content-disposition=inline%3B%20filename%3DMaternitas_lavender_1.pdf&X-Amz-Algorithm=AWS4-HMAC-SHA256&X-Amz-Credential=AKIAIWOWYYGZ2Y53UL3A%2F20191112%2Fus-east-1%2Fs3%2Faws4_request&X-Amz-Date=20191112T112459Z&X-Amz-Expires=3600&X-Amz-SignedHeaders=host&X-Amz-Signature=1f2c30e70a2f0e4855906245cbcf9a003c3f393f368bf798db356833a1925baf [PubMed/ Google Scholar/ ResearchGate].
 16. Santos J, de Oliveira S, da Silva F et al. Low-level laser therapy for pain relief after episiotomy: a double-blind randomised clinical trial. *Journal of Clinical Nursing* 2012; 21(23-24): 3513-3522. Available from: <https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1365-2702.2011.04019.x> [DOI: <https://doi.org/10.1111/j.1365-2702.2011.04019.x>/ PubMed/ Google Scholar/ ResearchGate].
 17. Mahishale A, Chougala A, Patted S. Effect of therapeutic ultrasound and maternal cooling gel pad for perineal pain following vaginal delivery with episiotomy. *Journal of Womens Health Care* 2013; 2: 3. Available from: <https://www.longdom.org/open-access/effect-of-therapeutic-ultrasound-and-maternal-cooling-gel-pad-for-perineal-pain-following-vaginal-delivery-with-episiotomy-2167-0420-1000128.pdf> [DOI: <https://doi.org/10.4172/2167-0420.1000128/> Google Scholar/ ResearchGate].
 18. Aradmehr M, Azhari S, Ahmadi S et al. The effect of chamomile cream on episiotomy pain in primiparous women: a randomized clinical trial. *Journal of Caring Sciences* 2017; 6(1): 19-28. [DOI: <https://doi.org/10.15171/jcs.2017.003/> PubMed/ Google Scholar].
 19. Marra C, Pozzi I, Ceppi L et al. Wrist-ankle acupuncture as perineal pain relief after mediolateral episiotomy: a pilot

- study. *The Journal of Alternative and Complementary Medicine* 2011; 17(3): 239-241. [PubMed/ Google Scholar/ ResearchGate].
20. Wilasrusmee S, Chittachareon A, Jirasiritum S et al. Naproxen suppository for perineal pain after vaginal delivery. *Obstetric Anesthesia Digest* 2009; 29(2): 100-101. [DOI: <https://doi.org/10.1097/01.aoa.0000350641.18538.7e> PubMed/ Google Scholar/ ResearchGate].
 21. Bar-Oz B, Bulkowstein M, Benyamini L et al. Use of antibiotic and analgesic drugs during lactation. *Drug Safety* 2003; 26(13): 925-935. [PubMed/ Google Scholar/ ResearchGate].
 22. Alvarenga MB, Francisco AA, de Oliveira SMJV et al. Episiotomy healing assessment: Redness, Oedema, Ecchymosis, Discharge, Approximation (REEDA) scale reliability. *Rev Latino-Am Enfermagem [Internet]*. 2015; 23(1): 162-168. [DOI: <https://doi.org/10.1590/0104-1169.3633.2538> PubMed/ Google Scholar/ ResearchGate].
 23. Way S. A qualitative study exploring women's personal experiences of their perineum after childbirth: Expectations, reality and returning to normality. *Midwifery* 2012; 28(5): e712-9. Available from: [https://www.midwiferyjournal.com/article/S0266-6138\(11\)00127-6/fulltext](https://www.midwiferyjournal.com/article/S0266-6138(11)00127-6/fulltext) [DOI: <https://doi.org/10.1016/j.midw.2011.08.011> PubMed/ Google Scholar/ ResearchGate].
 24. Dasanayake D. A randomized controlled trial of rectal analgesia diclofenac sodium for relief of perineal pain following child birth. *Sri Lanka Journal of Obstetrics and Gynaecology* 2014; 36(1): 14-16. Available from: <https://sljog.sljol.info/articles/abstract/10.4038/sljog.v36i1.6962/> [DOI: <http://doi.org/10.4038/sljog.v36i1.6962/> Google Scholar/ ResearchGate].
 25. Yildizhan R, Yildizhan B, Sahin S et al. Comparison of the efficacy of diclofenac and indomethacin suppositories in treating perineal pain after episiotomy or laceration: a prospective, randomized, double-blind clinical trial. *Archives of Gynecology and Obstetrics* 2009; 280(5): 735-738. Available from: <https://link.springer.com/article/10.1007%2Fs00404-009-1006-3> [PubMed/ Google Scholar/ ResearchGate].
 26. Hedayati H, Parsons J, Crowther C. Rectal analgesia for pain from perineal trauma following childbirth. *Cochrane Database of Systematic Reviews*, 2003. Available from: <https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD003931/full> [DOI: <https://doi.org/10.1002/14651858.CD003931/> PubMed/ Google Scholar/ ResearchGate].
 27. Dodd J, Hedayati H, Pearce E et al. Rectal analgesia for the relief of perineal pain after childbirth: a randomised controlled trial of diclofenac suppositories. *BJOG: An International Journal of Obstetrics and Gynaecology* 2004; 111(10): 1059-1064. Available from: <https://obgyn.onlinelibrary.wiley.com/doi/full/10.1111/j.1471-0528.2004.00156.x?sid=nlm%3Apubmed> [DOI: <https://doi.org/10.1111/j.1471-0528.2004.00156.x/> PubMed/ Google Scholar/ ResearchGate].