



Effect of Aloe Vera Extract on Episiotomy Wound among Postnatal Mothers in a General Hospital, Krishnagiri: Interventional Study

C.Vinodhini

Professor in OBG, Nalapad group of institutions, Bangalore
email: vinodhinichandra26@gmail.com Mob No: 8951224493

ARTICLE INFO

Article history:

Received 09 July 2025
Received in revised form
19 August 2025
Accepted 24 August 2025 Available
online 10 October 2025

Keywords:

Aloe Vera extract, episiotomy, post
natal mothers, wound healing

ABSTRACT

Objective: To evaluate the effectiveness of aloe Vera extract in promoting episiotomy wound healing among post-natal mothers.

Methods: The study was conducted at government headquarters hospital, Krishnagiri. Forty-six mothers who have undergone vaginal delivery with episiotomy were studied and demographic data were recorded. Quasi experimental one group posttest only design was used to conduct the study. Aloe Vera extract was applied two times a day for a period of 5 days during the postnatal period. Throughout the hospital admission, ongoing assessment was done using Modified Southampton Wound Healing scale and the Wound regeneration was interpreted on 5th postnatal day using Modified Bates Jensen wound score continuum. Results: The result reveals that, the mean score during day 1 was 10.15 with mean percentage 53.42 and standard deviation obtained on wound assessment is 1.889. whereas, during day 5 the mean score obtained was 0.65 with mean percentage 3.42 and standard deviation was 1.681. The result also revealed that multigravida mothers (63%) had complete wound healing (1) on 4th day, whereas primipara mothers (37%) had complete wound healing by 5th day. The study also revealed that nutritional status has the influence in the progress of wound healing (2). In aloe Vera extract due to the presence of a property to penetrate and anesthetize tissue all the mothers expressed satisfaction after the application on episiotomy wound.

Conclusion: Effective post-natal care by the nurse midwife play a vital role in preventing complications. In order to minimize the discomfort for mothers in-terms of wound healing, alternative and complementary therapy now came in to existence to improve the wound healing with shortest time possible, minimal pain and reduce discomfort for the mother, Aloe Vera extract is an effective, safe, and low-cost intervention to promote episiotomy wound healing. Integration into routine postnatal care is recommended.

1. Introduction:

Episiotomy is common obstetric procedure performed to facilitate child birth, but it can cause discomfort, delayed wound healing and risk of infection. Nurses and midwives play a crucial role in ensuring optimal postpartum wound care. Aloe Vera extract (3), known for its Therapeutic properties (Anti-bacterial, anti-fungal and anti-inflammatory), has been used in complementary medicine for centuries. This study aimed to determine the effect of aloe Vera extract application on episiotomy wound healing among post-natal mothers.

2. Methods:

Approach: Quantitative approach was considered appropriate to determine the effectiveness of aloe Vera extract.

Design: Quasi experimental posttest only design was adopted in this study.

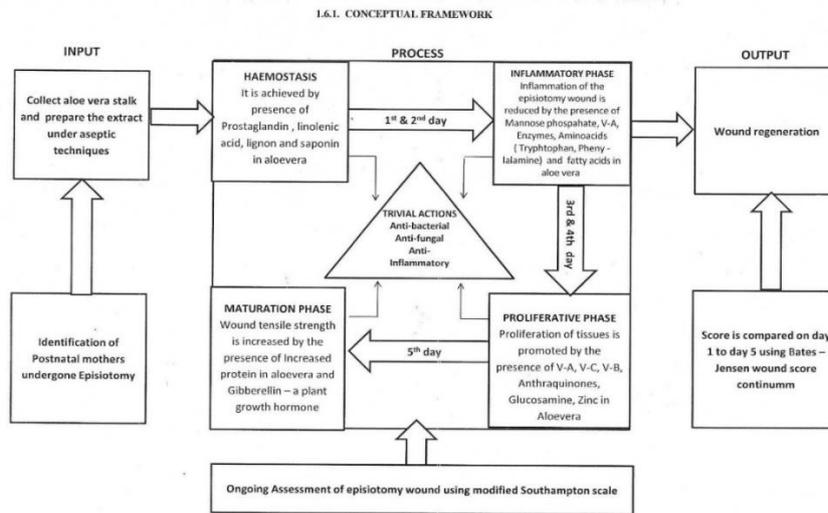
Settings and participants: The study was conducted in Government Head Quarters Hospital, Krishnagiri, Tamilnadu. Total number of deliveries conducted per year is 4,920 to 4950. The mothers who have undergone normal vaginal delivery with episiotomy was considered as accessible population. Convenient samples of 46 post-natal mothers were selected for the interventional study.

Intervention:



After the preparation of Aloe Vera extract, the initial assessment of episiotomy wound was done using Modified Southampton scale (10), the extract was Figure:1

applied on episiotomy wound two times a day (morning and evening) for a period of five days in addition to routine perineal care (figure:1).



Outcome measure: Wound regeneration is assessed using Bates Jensen wound score continuum on 5th post natal day and interpretation are made accordingly.

Data Analysis: The data collected were grouped and analyzed using descriptive and inferential statistical methods.

Table: 1

Distribution of Weight of Postnatal Mothers		
Weight in kilograms	Number of samples	Percentage (%)
46-50	11	24
51-55	12	26
56-60	16	35
61-65	7	15
Total	46	100

Majority of the post-natal mothers 35% weighs between 56-60 kgs, 26% of mothers were between 51-55 kgs, about 24% of mothers weighs between 46-50 kgs, whereas about 15% of mothers were between 61-65 kgs. (Table:1)

Table: 2

Distribution of Gestational Age of Postnatal Mothers		
Gestational age in weeks	Number of samples	Percentage (%)
37-39	30	65
40-42	16	35
Total	46	100

65% of women delivered between 37-39 weeks of gestation and about 35% of women delivered between 40-42 weeks of gestation. (Table:2)

Table: 3

Age Distribution of Postnatal Mothers		
Age (in years)	Number of samples	Percentage (%)
19-22	27	59
23-26	14	30
27-30	5	11
Total	46	100

The table -3 reveals the age distribution that about 59% of post-natal mothers belongs to the age group of 19-22 years, whereas about 30% of mothers were between 23-26 of age and 11% were between 27-30 years of age.

The graph -1 reveals that majority of multigravida mothers (63%) had complete wound healing (1) on 4th day, where asprimi mothers (37%) had complete wound healing by 5th day.

Figure:2

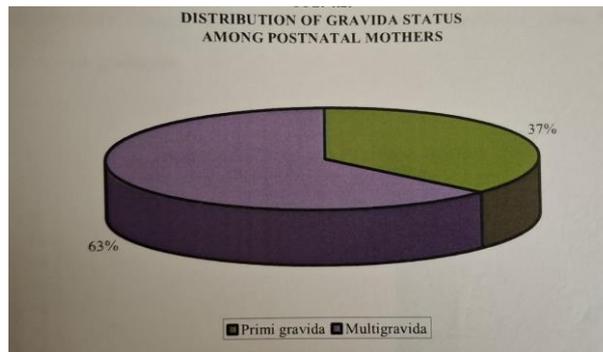


Table: 4

Analysis on Progress of Wound Healing					
Wound healing score	Mean	Standard deviation	Mean Percentage	Mean difference	't'
DAY 1	10.15	1.889	53.42	49.99	18.277*
DAY 5	0.65	1.681	3.42		

(N = 46)

*Significant at 0.01 Level

Karl person's-efficient correlation was calculated to find out the influence of selected demographic variables on progress of wound healing after the application of aloe Vera extract on episiotomy wound. (Table-5)

Table: 5

Influence of Demographic Variable on Progress of Wound Healing	
Demographic Variables	r' value
Gravida status	0.792
weight	0.624

It reveals that there exists a positive co relation between gravida status, weight and episiotomy wound healing. Hence, duration of episiotomy wound healing (9) also influenced among post-natal mothers.

3. Results

The result reveals that, the mean score (Table:5) during the day 1 was 10.15 with mean percentage 53.42 and standard deviation on wound assessment is 1.889. whereas, during day 5 the mean score obtained was 0.65 with mean percentage 3.42 and standard deviation was 1.681. the study also revealed that Multigravida mothers had a complete wound healing on 4th day, where asprimi mothers had complete wound healing on 5thpost natal day.

4. Discussion:

This study showed that aloe Vera extract significantly improved wound healing in mothers with episiotomy. The findings support previous studies highlighting aloe Vera's Therapeutic properties (Visuthikosol et al., 2008; Kong 2019; Sharma patel,2021). Aloe Vera is a natural, cost effective, and accessible intervention that nurses and midwives can integrate in to post-partumcare.

5. Conclusion

Aloe Vera is cost effective and widely available, the extract application accelerates episiotomy wound healing can be safely incorporated in to standard practices. Further large-scale studies are recommended for diabetes, Hypertension and genital infections, also in Long term benefits such as, dyspareunia and scarring.

6. References

1. Lisa, B&Signerallo (2000), Effect of Aloe Vera extract on Perineal Wound Healing.British Medical Journal, 30, 8, 320.
2. Smith A, et al.(2019), Prevalence and outcomes of episiotomy in obstetric practice.Jobstet Gynecol.. 42, 45
3. JohnsonP,et al (2020), Phytochemical properties of Aloe vera and its role in wound healing.J herbal med.
4. Ali s,et al.(2022), Effectiveness of Aloe vera on episiotomy wound healing: A randomized controlled trial.Midwifery.
5. Patel M, et al. (2024), Biological mechanisms of Aloe vera in tissue repair and regeneration. Phytomedicine.630
6. Robinson (2019), properties of Aloe vera on Episiotomy Wound. Journal of Nurse Midwifery Nursing.29, 3, 186-190
7. Schidmt, juliane, M., Green spoon., Jeffrey (2019) Beneficial Effect of Wound Helaing. Journal of Alternative and Complementary Medicine. 6, 4, 18 -20.
8. Vogler and Ernst, E (2018), ASystematic Review of Aloe vera and its clinical effectiveness. British Journal of general Practice. 49, 423-428.
9. Mary,M.c., Guniess and Kathleen Nair (2005). Perineal outcomes on Tissue Healing. Retrieved on May, 2018 from [http://:www.tissue.heal.com](http://www.tissue.heal.com)
10. William &wilkins.(1992). Validity and Reliability of Southampton Wound Assessment Tool. Retrieved on oct.22 from www.kashvet.org/vets/com. 5,6.

