

CASE STUDY

Management of Open Episiotomy Wound through Ayurveda-A Case Report

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ABSTRACT

Episiotomy is surgically planned incision on the perineum and the posterior vaginal wall during second stage of labor to facilitates easy vaginal delivery of baby and prevent irregular perineal tear. The perineum is a moist part of the body that is ideal for infection or poor healing. Although in Ayurvedic Samhita, description of episiotomy wound has not been given directly but *Vrana* (wound) is described very well and Episiotomy wound can be considered as *Yoni vrana*. A 32 years old post-natal primi female patient, delivered 10 days ago, came to OPD of Prasuti and Striroga, National institute of Ayurveda, Jaipur with complaint of opened episiotomy stitches with pain, itching and burning in episiotomy site and inguinal region. This patient was successfully treated with drugs having *Vrana shodhana* and *Ropan* qualities. Along with oral medication *Triphala guggulu*, the patient was treated with *Panchvalkal Kashya yoni prakshalan*, *yoni dhoopana* with *Guggulu*, *Nimba* and *Haridra*, and Local application of *Jatyadi taila*. Thus, we can conclude from the study that this Ayurveda regimen plays an effective role in the management of open unhealthy episiotomy wound.

Key Words Episiotomy, *Yoni Vrana*, *Vrana Shodhana*, *Vrana Ropana*

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INTRODUCTION

Episiotomy is surgically planned incision on the perineum and the posterior vaginal wall during second stage of labor to facilitates easy vaginal delivery of baby and prevent irregular perineal tear¹. The perineum is a moist part of the body that is ideal for infection or poor healing. The female suffers from immense pain and discomfort due to the episiotomy wound in this delicate location, and they seek the proper medical treatment and attention. Postpartum women faces a lots of difficulties in sitting,

walking, standing and in urination also. So, it is very much necessary that perineal shall be healed as soon as possible to avoid the complications². In ayurvedic classics, *Yoni Kshata*, *Yoni Bheda*, *Yoni Vibhinnata*, *Yoni Shophya*, *Yoni Shula*, *Yoni Bramsha*, *Yoni Dosha*, etc. are mentioned in the *Sutika Roga*, suggests that perineal trauma may be the cause of these conditions³. Even though the episiotomy wound isn't specifically mentioned in the Ayurvedic Samhita but *Vrana* (wound) is described very well. Episiotomy wound can be considered as *Yoni vrana*. In this

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case a Primi patient had underwent full-term normal delivery with right mediolateral episiotomy without any obvious complications. After 10 days of delivery, she came in the OPD with unhealthy open episiotomy wound. *Vrana chikitsa* was adopted in this case for episiotomy wound healing. Drugs having *Shodhana* and *Ropana* qualities are essential for wound healing. Considering this approach, this case was successfully treated with *Vranashodhna* and *Ropana* drugs like *Triphala guggulu*, *Panchvalkal kashya*, *Guggulu*, *Haridra*, *Nimba* and *Jatyadi taila*.

Patient's Information:

A 32 years old primi female patient delivered FTNVD with RMLE as vertex presentation an alive female child on 17th August 2022 at National Institute of Ayurveda Jaipur. After 2 days of delivery patient was discharged in healthy condition. On 26th August 2022, patient

THERAPEUTIC INTERVENTION:

S.No.	Aushadi/Drug	Matra/Quantity	Kalpana/Form	Kala/Dosa	Anupana
1	<i>Triphala Guggulu</i>	500 mg	<i>Guggulu</i>	BD	Lukewarm Water
2	<i>Panchvalkal Kashya</i>	-----	For <i>Prakshalana</i>	BD	
3	<i>Guggulu</i> <i>Nimba</i> <i>Haridra</i>	10 gm 5 gm 3 gm	For <i>Yonidhoopan</i>	BD	
4	<i>Jatyadi taila</i>	----	For <i>yoni aalepana</i>	BD	

This treatment was administered twice daily for 15 days. The episiotomy wound was first treated with lukewarm *Pancavalkal kashya*, then *Sthanik dhoopan* with *Guggulu*, *Nimba* and *Haridra* was given for 15 minutes. Following that, *Jatyadi Taila* was applied to the affected area, including

came to prasuti tantra and stri roga OPD, NIA, Jaipur with complaint of pain, burning and itching in episiotomy stitches and inguinal region since 5 days.

Clinical findings:

Local examination revealed open unhealthy episiotomy wound with purulent discharge. Marks of excoriation was also present on vulval region and inguinal region (Figure 1). The patient was in so much pain that she was having difficulty in sitting position.

General and systemic examination:

On general examination, body temperature (98.4 degree F), pulse (86/min), BP (110/70 mm of hg) were within normal limit. Uterus was well contracted (~14 weeks size), bleeding per vagina normal. On systemic examination, no abnormality was seen. On abdominal examination, no abnormality was detected.

the episiotomy wound and inguinal region. *Jatyadi Taila* was then applied on a piece of sterile gauze that was placed over the episiotomy wound for two hours. Up to the 15th day of the wound's healing, *Triphala guggulu* was administered orally.

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ASSESSMENT TOOLS:

In this study, REEDA Scale and Visual analogue scale were used to assess episiotomy wound healing and Pain. The REEDA Scale is a tool for assessing perineal healing and it analyses redness, edema, ecchymosis, discharge and apposition or approximation. In REEDA Scale, the scores ranged from 0 to 15, a lower score indicates better healing at the episiotomy site and higher score shows poor healing process.

Visual Analogue Scale is an 11 point scale scored from 0 to 10 in which zero shows no pain, 1–3 shows mild pain, 4–7 shows moderate pain, and 8–10 shows severe pain. Examination of healing

status of the episiotomy wound was performed on 1st day, 7th day and 15th day during treatment

OUTCOME:

It was observed that purulent discharged reduced from the third day of treatment and there was slight relief in pain, burning and itching sensation. On the 15th day the wound had shown complete healing (Figure 3). REEDA Score was achieved 10 on first day, 5 on 7th Day and 0 on 15th day on treatment (Table 1). Similarly, on VAS scale, the score was 8 on 1st day of treatment, 4 on day 7th of treatment and 0 on day 15th of treatment.

Table 1 Before, During and After Treatment Reeda Score

REEDA SCALE SCORING	REDNESS	OEDEMA	ECCHYMOSIS	DISCHARGE	APPROXIMATION	TOTAL SCORE
DAY 1 st	3	2	0	3	2	10
DAY 7 th	1	1	0	1	1	4
DAY 15 th	0	0	0	0	0	0



Figure 1 On day 1st Treatment



Figure 2 On day 7th of Treatment **Figure 3** On Day 15th of Treatment

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DISCUSSION

Triphala guggulu: *Triphala guggulu* is mainly possessing *Vranashodhana* and *Vrana ropana* properties. The main ingredients of *Triphala guggulu* is *Triphala* and *Guggulu*. Experimental studies showed that anti-inflammatory and anti-microbial activity of the ingredients of *Triphala guggulu*⁴. Reactive oxygen species (ROS) are crucial regulators of wound healing process. Excessive production of ROS or impaired ROS detoxification cause oxidative damage, which is the main cause of non-healing chronic wound⁵. *Triphala* has immune-modulatory and *Tridosha shamak* property and hence it reduces the oxidants burden and promote rapid wound healing⁶. *Triphala* also contains ascorbic acid, which is a cofactor for the synthesis of collagen as well as elastin fibers⁷. Collagen a key component of the extracellular matrix, plays critical roles in the regulation of the phase of wound healing either in its native, fibrillar conformation or as soluble components in the wound milieu⁸.

Panchvalkal Kashya: *Panchvalkal kashya* is a combination of five astringent drugs and having antiseptic, anti-inflammatory, Analgesic, anti-parasitic, anti-oxidant, anti-bacterial, anti-microbial, anti-helminthic, anti-pyretic, and wound purifying and healing properties⁹. Researches explains that Tannins, phytosterols and flavonoids are present in *Panchvalkal* that having anti-inflammatory property; hence they prevent the prolongation of the initial phase of

wound healing. They also reduce the pain, tenderness, redness, swelling like features and thus help to control the infection¹⁰.

Yoni Dhoopana: *Yoni Dhoopana* is a part of *Sthanika chikitsa*, where fumigation of yoni Pradesh is carried in various indicated conditions utilizing the appropriate drugs. Drugs used in *Dhoopana* (herbal fumigation with fire and flames) comprise volatile or aromatic oils which have actions like anti-microbial, anti-inflammatory and analgesics. In this case *Guggulu*, *Nimba* and *Haridra* were used for *Yoni dhoopana*. **Guggulu:** *Guggulu* has been used in a number of *Dhoopana* formulations in Ayurveda classics and having anti-inflammatory, antimicrobial, anti-fungal and antioxidant properties¹¹. **Nimba:** Similar to *Guggulu*, *Nimba* also have Anti-inflammatory, Anti-oxidant properties¹². Azadirachtin in the *Neem* seed oil is a proven chemical for its insecticidal properties¹³.

Haridra: According to ayurvedic classics, *Haridra* has *Krimighan*, *Kandughan*, *Vishaghan* and *vranahara* properties. Various Analytical studies explain it anti-inflammatory, antibacterial, anti-fungal, insecticidal effect, Anti-parasitic effect¹⁴. Research studies suggested that the essential oil of *curcuma longa* efficient at inhibiting the growth of *staphylococcus aureus*, *Staphylococcus epidermis*, *Escherichia coli* and *pseudomonasaeruuginosa*¹⁵.

Jatyadi taila: *Jatyadi taila* is known for its wound healing properties. It is indicated in *Nadi vrana*, *Sphotaka*, *Shastra prahara vrana*, *Dagdha vrana*

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and *dushta vrana*¹⁶. Most of the ingredients of *jatyadai taila* having *Tikta kashya rasa* and *laghu ruksha* properties. These *Rasa* and *Guna* possess properties like *Vrana ropana* and *Tawak-mamsa sthireekarana*¹⁷. Animal study also suggested the wound healing efficacy of *jatyadi taila*¹⁸. Ingredients of *jatyadai taila* like *Patola*, *jati kutaki lodhra sariva* has *shotha hara* properties thereby reduces the peripheral tissue edema and other ingredients like *manjistha* and *sariva* having *rakta prasadak* properties which helps in improving tissue perfusion and strengthen local venous structure¹⁷.

CONCLUSION

In this study, Ayurveda has played significant role in healing the open episiotomy wound as well as combating the infection. Thus, it can be concluded that Ayurveda treatment can be helpful in case of unhealthy open episiotomy wound.

INFORMED CONSENT:

Consent of the patient was taken for the photographs and before reporting the case for publication.

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