

EPISIOTOMY WOUND AND ITS CORRELATION WITH VAIDYAKRITA VRANA IN AYURVEDA WITH ITS MANAGEMENT.

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ABSTRACT:

"Childbirth is more admirable than conquest, more amazing than self-defense, and as courageous as either one," said Gloria Steinem (Word np). Episiotomy is a surgically planned incision on perineum and posterior vaginal wall during second stage of labour. Episiotomy is a wound so it can be resembles with Vrana(wound) in Ayurvedic texts, Vrana(wound) is discontinuation of lining membrane that after healing leaves a scar for whole life which resembles closely as modern definition. A broad description for Vrana, Vranashodhana and Vranaropana is mentioned in Susruta Samhita. Perineum can be correlated with muladhar chakra and incision on perineum and posterior vaginal wall can be correlated with bhedana karma in Ayurveda classics.

Ayurvedic classics had emphasized at various places to take care of wounds which occurs either as a result of vitiated Doshas or of traumatic in origin. There is no doubt, that art of surgery revolves around the Vrana and its essence is uncomplicated healing. In Sutrasthana, for Vranasotha Sushruta has mentioned seven methods and in Chikitsa, these seven principles are elaborated into sixty procedures. He further gives special emphasis to the diet and regimen to the wounded person for quick recovery and to avoid complications as well. Though an elaborate description of *Vrana-sodhana* is found in the *Ayurvedic Samhitas*, its systematic description is available in *Sushruta samhita* where in *Dushta-vrana* and its manifold management has been described very comprehensively. Among the various drugs are mentioned for treatment of *dushtavrana*.

KEYWORDS: Episiotomy wound, Vaidyakrita vrana, Muladhar, Bhedana karma, Vrana chikitsa

INTRODUCTION:

Delivery is the most complicated stage in women's life. So for better and easy expulsion of baby a Surgically planned incision on the perineum and the posterior vaginal wall is given during the second stage of labor is called episiotomy (perineotomy)¹. It is given to cut short the duration, to avoid perineal tear and to protect the head of the fetus. The episiotomy may be incised midline down the Centre of the perineum, or the medio-laterally, which extends in a diagonal angle to either the left or right side. With or without episiotomy, the perineum may suffer from lacerations during child birth.² The concern of health personnel during this period should be to provide comfort to her, help her in relieving the pain and to prevent infection. Enhancing healing of episiotomy wound is one of the major concerns after a normal delivery.³

The episiotomy wound should be assessed for edema, swelling, tenderness, and discharge and also for localized pain.⁴ Episiotomy is used widely today because it prevents lacerations, heals better, easier to repair than a ragged tear, allows for easier and safer regression of the head thereby preventing possible brain damage reduced incidence of uterine prolapsed in subsequent deliveries. If performed before, tissues are over stretched, shortens the second stage of labor and it may prevent painful hemorrhoids. It is also performed for a majority of forceps deliveries especially in ATC (axis traction forceps) and also with breech and face deliveries.⁵

In Ayurveda, episiotomy wound seems to be parallel to Vaidyakrita vrana of muladhar (perineum) by bhedan karma, Vrana (wound) is discontinuation of lining membrane that after healing leaves a scar for whole life which resembles closely as modern definition. A broad description for Vrana, Vranashodhana and Vranaropana is mentioned in Susruta Samhita.

Vaidyakrita vrana lakshana are⁶:

vk;rúk fo'kkyúk lqfoHkDrks fujkJ;%A

izklrdkyd`rÜpkfi oz.k% deZf.k 'kL;rsAA(Su.Su. 5/9)

- *Aayat*
- *Vishal* (adequate length and extensibility)
- *Suvibhakt* (regular and uniformly cut edges)

- *Nirashrya* (no hollow space/sinus inside)
- *Praptkalakrita* (made at an appropriate time),

Before the detail description of Vrana(wound), it is necessary to know the anatomy and structure of Muladhar(perineum).

Muladhar:

The triangular part in between the anus and genitalia is called the *Muladhara Chakra*.⁷ It is attached to the mouth of the *Sushumna* (spinal cord) and is placed below the genitals and above the anus. It has four petals of crimson hue. Its head (mouth) hangs downward. Its petals are the four letters, i.e. *Vama*, *Sama*, *Shama* and *Shhama* of the shining color of gold,⁸ which is characteristics of each petal. The *Chakra* is situated at the base of spinal column. It forms nerve plexuses around the *Sushumna* (spinal cord). This region of *Muladhara Chakra* represents the pelvic organs, i.e. rectum, uterus, bladder.⁹ Hence, regarding location of *Muladhara Chakra*, it may be mid-perineum area.¹⁰ It is the ground for *Apana Vayu*.^{11,12} The function of *Apana Vayu* is being excretion of urine and feces and also delivering fetus.¹³ Similar functions are allotted to *Muladhara Chakra* in *Shat Chakra Nirupana*.¹⁴ In modern texts, these functions are carried out as a reflex action by pelvic plexuses (inferior hypogastricplexus).¹⁵ A thorough review of modern literature was done for its anatomically correlated structures (perineum and others) to support the indications in the ancient texts.

Peshi of Muladhara¹⁶:

1. *Uparistha mooladhaara peshi* (superficial perineal muscle)
 - a. *Uparistha mooladhara anuprishthika peshi*(Superficial transverse perineal muscles): Originate from kukundarasthi arbud (Ischial tuberosity) and inserted into muladhara (the central tendon of perineum).
 - b. *Shishnakanda apanjka peshi*(bulbospongiosus muscle): Originates from muladhar (the central tendon of the perineum) and inserted into the Inferior fascia of urogenital diaphragm, bhagasthi (pubic arch) and root and bhagashishnika (dorsum of clitoris) in female.

- c. *Shishna praharshika peshi*(ischiocavernosus muscle): Originates from kukundarasthi arbud (Ischial tuberosity) and jaghan bhag prashakha (ischial and pubic rami) and inserted into bhagashishnika (clitoris) in female.
2. *Gambhira mooldhaara peshi* (deep perineal muscle)
 - a. *Gambhira mooldhaara anuprishthika peshi*(deep transverse perineal): Takes origin from kukundarasthi (the ischial rami) and inserted into muladhar(the central tendon of perineum).
 - b. *Mutra marga samvarani peshi*(external urethral sphincter muscle): Takes origin from jaghan bhag prashakha (the ischial and pubis rami) and inserted into yoni (vaginal wall) in female.
 - c. *Guda marga samvarani*(external anal sphincter): Originates from gudanutrik peshi (the anococcygeal ligament) and inserted into muladhar (the central tendon of perineum).

Mansa peshi of shroni and guda pradasha (muscle of the pelvic floor)

1. *Guda unnamanika peshi* (levator ani muscle)
 - a. *Bhaganutrike peshi* (pubococcygeus muscle): Originates from Jhagasth(the pubic bone) and inserted into the anutrikasthi (Coccyx), mutra marga (urethra), muladhar (central tendon of perineum) and anococcygeal raphe.
 - b. *Shroniphalakanutrika peshi* (illicococcygeus muscle): Originate from kukundar kantik (the ischial spine) and inserted into anutrikasthi (the coccyx).
2. *Anutrika peshi* (coccygeus muscle): Originate from kukundar kantik (the ischial spine) and inserted into kukundasthi(the lower sacrum) and upper anutrikasthi (coccyx verterba).

Vaidyakrita vrana should be made carefully because of risk of Aghata of Marmas such as yoni, guda, basti etc.

MANAGEMENT OF VRANA:

In Sutrasthana, for Vranasotha Sushruta has mentioned seven methods and in Chikitsa, these seven principles are elaborated into sixty procedures. He further gives special emphasis to the diet and regimen to the wounded person for quick recovery and to avoid complications as well. Similarly under the heading “Vaikritapaham”, Further he has divided the entire course of treatment into three phase:

1. *Purvakarma*

2. *Pradhanakarma*

3. *Paschatakarma*.

1. *Purvakarma*¹⁷: Preoperative measures which include the preparation of the required materials for operation or procedure and preparation of the patient to make him fit and mentally stable for the procedure.
2. *Pradhanakarma*¹⁸: It includes the eight standard surgical procedures.
3. *Paschatakarma*¹⁹: It is the post-operative care which includes all the measures to achieve complete healing of the wound and restore the normal colour, texture and surface of the wounded area. The medicines he advocated for the management includes local application to subside the *Vranashotha* in the primary stage, local washing and fumigation to get the wound clean and devoid of infection, internal medicines for quick healing and lastly cosmetic measures to restore normal pigmentation. Treatment of *Nija Vrana* starts from the primary stage of healing i.e. *Vranashotha*.

Sushruta gave seven principles for *Vranashotha* management as follows²⁰:-

1. *Vimlapana*

2. *Avasecana*

3. *Upanaha*

4. *Patana*

5. *Shodhana*

6. *Ropana*

7. *Vaikritapaham*

All the sixty *Upakarmas* are categorized under the above said seven principles and they were grouped as-

1. *Vimlapana*²¹: This is aimed for resolving the *Vranashotha* in its primary stage by subsiding the vitiated doshas. This is carried out by gentle massage over the swelling with the help of finger. The action can be achieved with the help of the following measures as well, (a) *Apatarpana* (b) *Aalepa* (c) *Parisheka* (d) *Abhyanga* (e) *Sveda* (f) *Raktavasechana*.
2. *Avasechana*²²: This is aimed to resolve the inflammation by draining or expelling the vitiated Doshas. Dalhana has clarified that the *Avasechana* procedure should be adopted as per involvement of the Doshas. Four measures are included in this *Upakrama*. (a) *Visravana* (b) *Snehana* (c) *Vamana* (d) *Virechana*
3. *Upanaha*²³: This helps in bringing the *Shotha* to the *Pakwa* stage and includes two procedures like- (a) *Upanaha* (b) *Pachana*
4. *Patana*²⁴: This is the surgical procedures to drain out the pus and other decomposed substances in the *Shophya* already formed. This constitutes nine measures as, (a) *Chhedana* (b) *Bhedana* (c) *Darana* (d) *Lekhana* (e) *Eshana* (f) *Aaharana* (g) *Vyadhana* (h) *Vyuhana* (i) *Sivana*
5. *Shodhana*²⁵ & 6. *Ropana*²⁵: These measures of management are for debridement of the dead tissue, cleansing of the wound and to support the healing process. There are total thirteen measures mentioned,

(a) *Sandhana* (b) *Pidana* (c) *Shonitasthapana* (d) *Nirvapana* (e) *Utkarika* (f) *Kashaya* (g) *Varti* (h) *Kalka* (i) *Sarpi* (j) *Taila* (k) *Rasakriya* (l) *Avachuranana* (m) *Dhupana*.
7. *Vaikrutapaham*²⁶: It is mentioned mainly to save the patient from different types of deformities after healing of wound i.e. for cosmetic purpose and it consists of twenty six measures as follows- (a) *Utsadana* (b) *Avasadana* (c) *Mridukarma* (d) *Darunakarma* (e) *Ksharakarma* (f) *Agnikarma* (g) *Krishnakarma* (h) *Pandukarma* (i) *Pratisarana* (j) *Romasanjanana* (k) *Romapaharana* (l) *Bastikarma* (m) *Uttarabasti* (n) *Bandhana* (o) *Patradana* (p) *Krimighna* (q) *Brihanakarma* (r) *Vishaghna* (s) *Shirovirechana* (t) *Nasya* (u) *Kavala* (v) *Dhooma* (w) *Madhusarpi* (x) *Yantra* (y) *Aahara* (z) *Rakshavidhana*

Among 60 measures for the management, mentioned above of *Vrana*, 13 measures are mentioned for the purpose of *Shodhana* and *Ropana*. In this study the aim is to find the healing

effect of *Guggulu, Saral, Yava, Haridra* and so for better understanding of *Shodhan* and *Ropan* these 13 measures are described in detail as below-

1. *Sandhana*²⁷: *Sandhana* means the reunion of the edges of the wound after suturing, and with the help of *Sandhaaneeya* drugs.
2. *Pidana*²⁸: This is the process for drawing out the pus by means of drugs. It is performed by applying drugs around the mouth of the *Vrana*, seated in the *Marma* or filled with pus.
3. *Shonitasthapana*²⁹: In case of excessive bleeding from the *Vrana* by the damage of veins and / or arteries should be stopped with suitable measures.
4. *Niravapana*³⁰: This is performed for the purpose of getting relief from pain, burning sensation and fever. Some drugs having cooling property are mixed with clarified butter and applied on the *Vrana*, so quick healing may be achieved with relief in symptoms.
5. *Utkarika*³¹: *Vrana* which are unhealthy with thin secretion and non-suppurating feature, rough and hard in texture, having piercing and pricking pain should be treated with *Utkarika* (Poultice) prepared with drugs having *Vatahara* property like *Amla Varga* and *Kakolyadi* group etc.
6. *Kashaya*³²: *Kasaya* is mentioned for the cleaning of the *Vrana* and helping in the healing process. Washing out the *Vrana* with decoctions prepared from the drugs having *Vranashodhana* property to get the *Vrana* free from infection, discharge etc.

This is very much important in the management of *Vrana* because only *Shuddha Vrana* heals in properly and in proper time.

7. *Varti*³³: *Varti* (Plugs) containing drugs with cleansing property should be inserted into the *Vrana* to drain out the embedded matter like pus situated in the deeper tissues and in the *Vrana* having narrow external opening as in case of *Nadivrana* (sinuses).
8. *Kalka*³⁴: *Kalka* (Paste), made up of such types of drugs which contain required healing properties, is applied over the wound with the aim of getting the wound clean and helps in healing process.
9. *Sarpi*³⁵: *Sarpi*, a medicated *Ghee*, applying on the *Pittaja Vrana* with burning sensation and suppuration for quick healing.

10. *Taila*³⁶: Medicated oils also advised for local application to achieve proper and quick healing in *Vrana* (wounds / ulcers).
11. *Rasakriya*³⁷: It is prepared with many drugs in semisolid form having *Rakshoghna* (Antibacterial) property and applied on the *Vrana* for encouraging healthy granulation.
12. *Avachurnana*³⁸: It is mainly for the purpose of healing and performed by dusting the fine powder of drugs that are known as promoters of healing. In classic it is indicated in *Medoj vrana*, superficial and fowled smelling wounds.
13. *Vrana Dhoopana*³⁹: Fumigation with drugs possessing *Rakshoghna* (disinfectant, purifying, fragrant, freeing from microbes) property keeps the wound clean.

Discussion:

Episiotomy (vaidyakrita vrana) is given in second stage of labor to prevent perineal tear and to cut short the duration of second stage. Lakshana of Vaidyakrita vrana are similar to that episiotomy wound like Vishal means the incision should be adequate in length and extensibility, Suvibhakt is regular and uniform cut edges so that suturing will be easy, Nirashrya means devoid of any hollow space, Praptakalakrita is that in which incision made at appropriate time during second stage when crowning occurs. Incision (bhedana) comes under ashtavidh shashtra karma in Ayurveda. Hence episiotomy wound should be treated like vrana. Acharya Sushruta has discussed about vrana and its chikitsha in detail with many vranaropak and vranasodhak dravyas are mentioned with beneficial properties in wound healing. Drugs with different rasa, guna, virya with properties of *vedanasthapan*, *krumighna*, *daurghndhyahara*, *Vrnashodhan*, *Vrnaropan*, *krumighna*, *kaphavatashamak*, *jantughna*, *Shleshmaputihara*, *Twakdoshhara* are beneficial in wound healing. *Rasa, guna, virya* of any drug plays an important role in wound healing and prevention of infection i.e. madhura rasa with predominance of *prithvi* and *jala mahabhutas* and responsible for *dhatu poshana/ brimhana* by which increase the healing capacity of body/wound, In *amla rasa*, *agni* and *prithvi mahabhutas* are *Pradhan* and also help in *brimhana*. In *lavana rasa*, *agni* and *jala mahabhutas* are *pradhan* with properties of *chedya*, *bhedya* and *lekhyia karma* hence it does *vrana shodhana*. *Katu rasa* is *vayu* and *agni mahabhuta Pradhan* with *vrana shodhak* properties like *vrana-avsadana*, *margan-vivranoti*, *krimi-hinsati*, *shonitasnghatabhinatti*. *Tikta rasa* is *vayu* and *akash mahabhuta Pradhan* and has *vrana shodhana* and *ropana* properties like *vishaghna*, *krimighna*, *kandu-kustha prasamana*, *puya-*

pitta-shleshma upshoshana. In *Kashaya rasa pradhana mahabhutas* are *vayu* and *prithvi* and has *vrana shodhaka, sangrahi, sandhankara, ropana* properties. In healing of any wound drugs with both *sheeta* and *ushna virya* are beneficial as their *vrana ropaka* and *vrana shodhak* properties. Though the action of drug is not completely depending on the *guna* of any drug, yet it also modifies the action of drug. *Laghu, ruksha* and *tiksna guna* of drug are responsible for *vrana shodhana* and *guru, snigdha* and *pichhila guna* for *vrana ropana*. Various treatment modalities which are mentioned by Acharya Sushruta are fasten the process of healing and helpful in prevention of any type of infection.

Conclusion:

Episiotomy is given during second stage of labor which is similar to the *vaidyakrita vrana*. Perineum is correlated with *muladhara* and *bhedana karma* done on *muladhar* by Vaidya hence treated like *vrana*. Acharya sudhruta has mentioned *vrana chikitsa* in detail with *pathya* and *apathy*.

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