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# ROLE OF JATYADI TAILA IN YONI KSHATA (PERINEAL WOUND) WITH SPECIAL REFERENCE TO KRIYA KALA

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#### **ABSTRACT**

Backgrounds: Study is mainly based on pathology of wound (*Yonikshata*), prevention by knowledge the stages of *Kriya Kala* and its management through applications of *Jtyadi Taila* In present women who had gone under episiotomy operation or perineal tear during II<sup>nd</sup> stage of labour were selected. The perineal wound (*Yonikshata*) has got more chances to get infected so even the wound is initially clean the wound infection is global problem. At present there is no catalyst to promote wound healing. That entire physician can do to protect the wound from physical and bacteriological trauma which definitely delays the wound healing. *Jyatayadi Taila*, which is combination of eighteen drugs, is selected for study. In this reference *Kriya Kala* is very important concept of Ayurveda which deals with the early diagnosis management of diseases along with control in the progression of diseases by awareness the phases of *Kriya Kala* and these stages are collectively called as *Kriya Kala*.

**Keywords:** Perineal wound, *Jtyadi Taila*, *Kriya- Kala* and *Yonikshta*.

#### INTRODUCTION

Ayurveda is specified as a holistic system of healing which was advanced among the Brahmin stages of ancient India some 3000-5000 years back. It is the oldest living medical science which is still being practiced far and wide today. Ayurveda is establishing and maintaining balance of the life energies within human being, to a certain extent focusing on personality symptoms. If the person does not come to physician timely or any physician side ignorance can also causes vitiation of Dosha and further advancement of diseases takes place. In this reference Kriya Kala is very important concept of Ayurveda which deals with the early diagnosis management of diseases along with

control in the progression of diseases by knowledge of the phases of Kriya Kala. In the Kriya Kala Dosha are present in its vitiated form in the six stages due to this it is called as Shat Kriya Kala. Shat Kriya Kala is broadly described by the Sushruta in relation to wound and also described by the Charaka in three phases but it is the basic concept of Sushruta described in detail in Vrana Prashniya Adhyaya. To cure the disease completely by awareness of Shat Kriya Kala or Samprapti is important. Kriya Kala means Samprapti has six stages from the accumulation of Doshas till the disease is completely manifested. Pathology of any type of wound is related to Kriya Kala

and its goes to its state Yoni Kshata due ignorance of stage of Kriya Kala. The basic concept of Kriya Kala is to emphasize the need of early detection of a disease and a proper therapeutic intervention so the disease process may be reversed toward the normalcy without waiting for cure of an end stage disease to manifest. Physician will like to detect the defect right at the moment when seed of disease is just down. Sanchaya (stage of accumulation) is seed stage so; we have to diagnose the disease in Sanchaya (stage of accumulation) stage for the easy and proper management. If the physician destroyed the disease in this stage the disease there is no further development of diseases and it will be less strong. To diagnose the disease in this stage it is very essential to take the proper history of patient and after that properly investigate the patient in proper time. If the Sanchya stage is genetic, proper diet and life style is recommend to the patient. If the patient has come to physician at Bheda (stage of chronicity) or lost stage tell clearly the prognosis of disease or prefer to higher centre for further management. The aim of Ayurveda is 'Swastashya Swasthya Rakshanam, Aturasya Vikara Prashamanam' meaning by that the more emphasis has to be given on preventive part of disease. Though parturition is a physiological phenomenon, yet all the pregnant women may not be physiologically normal and need special attention. The aim of all perinatal care is the safe confinement, without any harm to the mother and foetus. Sometimes we have to deviate from normalcy to avoid bigger complication. Performance of episiotomy during second stage of labour is one of the examples. Due to some reasons few women get mild perineal tear during second stage of labour and that too needs special care. Clean wound can heal better if wound is kept free from secondary infection. The perineal wound has got more chances to get infected so even the wound is initially clean the wound infection is global problem. At present there is no catalyst to promote wound healing. That entire physician can do to protect the wound from physical and bacteriological trauma which definitely delays the wound healing. Sushruta was of the opinion that in all the women and in all the seasons a single drug cannot be

equally effective, so combination of drugs should be tried to obtain the wanted effect. In present study, Jatyadi Taila, which is a combination of eighteen drugs, is selected for trial. In other ancient texts (Bhaishasjya-Ratnawali Vranasotha Chikitsa) described as Vrana Sodhaniya (wound purifier) and Vrana Ropaniya. For study purpose, women registered were divided into three groups. The women of group I received the Yoni Prakshalan (Vaginal Douching) with lukewarm water and application of Jaityadi Taila on the wound while women of group II Yoni Praksyalam with lukewarm Triphala Quath and application of Jaityadi Taila and group III dressed with lukewarm water and application of antiseptic ointment on wound. To facilitate data interpretation. efforts were made to keep sample basically homogenous for that the delivered women with history of any medical complication like infection systemic or local; anaemia, diabetes, any bleeding disorders, etc. were excluded from the this study.

#### CONCEPT OF WOUND

Wound has been around as long as there has been life. The aim of Ayurveda is 'Swastashya swasthya Rakshanam, Aturasya Vikara Prashamanam' meaning by that the more emphasis has to be given on a preventive part of disease. Though parturition is a physiological phenomenon, yet all the pregnant women may not be physiologically normal and need special attention. The aim of all perinatal care is the safe confinement, without any harm to the mother and foetus. Sometimes we have to deviate from normalcy to avoid bigger complication. Performance of episiotomy during second stage of labour is one of the examples. Due to some reasons few women get mild perineal tear during second stage of labour and that too needs special care. Clean wound can heal better if wound is kept free from secondary infection. The perineal wound has got more chances to get infected so even the wound is initially clean the wound infection is global problem. At present there is no catalyst to promote wound healing. That entire physician can do to protect the wound from physical and bacteriological trauma which definitely delays the wound heals. Sushruta was of the opinion that in all the women and in all the seasons a single drug cannot be equally effective, so combination of drugs should be tried to obtain the wanted effect.

#### MANUFACTURE OF JYATADADI TAIL:

For a clean wound like the wound appeared in second stage of labour either by episiotomy or by perineal tear. For wound healing, there is no need of any medication. They are only required if there is evidence of infections to keep the wound infection free from other inhibitory factors of wound healing is the primary aim of management of wound healing. The drugs used for better wound healing have been reviewed from different Avurvedic Samhitas and Nighantus, i.e., Chraka Samhita, Sushruta Samhita, Vagbhata, Bhaishajya Ratnawali, Sarangdhara Samhita, etc. Sushruta is of opinion that a single drug cannot be effective in all the patients as well as in at all the stages of wound. So a combination of drugs should be used. Ropan drug is a nomenclature used for herb which promotes the healing. Most of the drugs described by Maharishi Sushruta, for this purpose are of the Kashya and Madhura Rasa. It is noticed that most of the drugs are of Ruksha Guna and of sheet veerya. They pacify the Vata and Pitta, subside the inflammation and hence are called Soth-hara (anti-inflammatory). After prescribing number of drugs, he advised that according to the necessity new drug can be added. The Jatyadi Taila described in Bhaishyajya Ratnawali (Vrana Sotha Chikitsa Prakaran) and Moorharoga Chikitsa Prakaran), Brihadvogatarangini (Vrana- Sotha Nidanam) and Shaarngadhara was prepared in the Ayurvedic Pharmacy, B.H.U., Varanasi.

# **INDICATIONS OF JATAYADI TAIL:**

It is beneficial in discharges with painful *Vranas*. Sinuses, traumatic wound, *Dagdha Vrana*, all types of *Mookhroga*, fistula-in-ano, *Upadansha*, *Dushtavrana*, skin disease, *Vishajanya Vrana*, *Dadru* and *Visarpa*. It does the *Vrana Shodhana* (purification of Vrana) and *Vrana Ropana* (wound healing) both processes.

#### INGREDIENTS OF JATYADI TAILA

Leaves of Chameli, Manjistha, Leaves of Nim, Leaves of Karanja, Leaves of Patola Haritaki, Kutha. Pure Tutha, Kamal Kesha Haridra, Anantmoola Padmakh. Lodhra, Yastimadhu, Daruharidra, seeds of Kranja, Kutakiand, Tila Taila is used in this preparation.

#### MATERIALS AND METHOD

Materials and methods can be summarized as follows:

- 1. Selection of cases
- 2. Grouping of cases
- 3. Examination General examination ,Systemic examination and Local examination
- 4. Laboratory Investigation Pre- operative and Post operative

#### **Selection of cases**

Cases for the present study were those admitted for delivery in labour room of Prasuti Tantras Ward. Selection of cases had done on the basis of detail history. Study was made on the women who had gone under episiotomy operation or perineal tear during IInd stage of labour. The women having any inhibiting factors of wound healing, i.e., infectious, diabetes, anemi, any bleeding disorders, etc., were excluded from the study .Maximum women in this study were between 20 to 30 years of age. Very young and older women were not registered for present study.

# **Grouping of cases:**

Total 60 women were selected for study in which 38 women who had gone under episiotomy and 22 women who were performed perineal tear. All the 60 women were divided into three groups, i.e., Group I, Group II, and Group III. Each group included 20 women. All the women were discharged on 5<sup>th</sup> postoperative day and advised them for follow check up on the 10<sup>th</sup> post operative day. In the women group I on the first day of operation, *Yoni Prakshalan* with lukewarm water for minutes and application of *Jatyadi Taila* on the wound was done three times daily. This management was continued up to 10<sup>th</sup> day. In case of Group II, from first post-operative day, *Yoni Prakshalan* with lukewarm, *Triphala quath* of Ph

(6.50) and application of *Jatyadi Tail* on the wound was done in same manner. In both the above groups, no systemic antibiotic and anti-inflammatory drug was given. In women of Group II, on first day of operation, *Yoni Prakshalan* with lukewarm water and application of antiseptic ointment on the wound was done in same manner. In this group, women were treated with systemic antibiotic and anti-inflammatory drug. The wound was examined in detail in all the women on 1<sup>st</sup>, 3<sup>rd</sup>, 5<sup>th</sup> and 10<sup>th</sup> post-operative day and effect of drugs was confirmed.

#### Physical examination

A complete physical examination was done before and after operation in each case under the following headings:

#### **General examination**

General appearance, weight, height, pulse, temperature, blood pressure, nutritional status, pallor, jaundice, lymphadenopathy, pupils, vision, sign of vitamin deficiency were note. After performing the per abdominal examination, following points were especially noted – Height of the fundus of uterus, related to weeks, foetal heart sound, presentation of the foetus were examined. Over distention of abdomen in case of hydramnios or twin pregnancy were also examined. Uterine contractions and its interval and duration were also note. Examination was done for previous perineal operation or wound, any local infection i.e., vulvovaginitis etc., vulval oedema any growth present in reproductive organs, etc.

# Post-operative systemic examination

Along with other systemic examinations height of uterus was also examined during follow up period to assess the involution of uterus occurred properly or not.

# Post-operative local examination

They were clinically examined every day in the postoperative period. The *Vrana Vedana* (intensity of Pain), *Vrana Shopha* (inflammation), *Vrana Varna* (colour of the wound), *Vrana Srava* (discharge) were examined carefully and the condition of the *Vrana* was assessed on 1<sup>st</sup>, 3<sup>rd</sup>, 5<sup>th</sup> and 10<sup>th</sup> post-operative days.

# **Investigation:**

The following investigations were done usually in all the cases before and after the operation.

- 1. Hematological Hemoglobin in gm%, total leukocyte count, fasting blood sugar.
- 2. Urine routine and microscopic examination, bacteriological examination was also done.
- 3. Vaginal Swab Culture Vaginal swab for culture and sensitivity was also taken and infected women were excluded from the study .Wound Swab Culture On 5<sup>th</sup> post-operative day, the wound swab taken for bacterial culture and sensitivity test.

#### **OBSERVATIONS**

Observations regarding age, parity, socio-economic condition, dietetic habit, bowel hygienic condition, previous perineal operation or wound, time taken for labour, nature of operation and obstetrical status, physical findings and investigations of various biological factors are given here. For the study, we have tried to keep the test sample homogenous. So far as age is concerned, maximum cases were below thirty years in all the groups.

# **DISCUSSION**

In nulliparous women, perineum is comparatively rigid. Therefore, during delivery, there are more chances of Yoni - Kshata (perineal injury). To avoid this complication, Muladhar Bhedan (episiotomy) is usually performed. This may be the reason that when we studied the wound healing majority of cases were nulliparous, means they were delivering first time. Naturally, their age was also less i.e., below 30 years in all the groups. It is seen that in elderly primi, due to some reason mostly delivery by caesarean section is performed. So number of women above 30 years for spontaneous vaginal delivery with episiotomy was less. Table No.1) few multiparous women had got perineal wound. They are the women in which mild tear occurred, they were also registered. Otherwise, majority of the women were nulliparous because episiotomy was performed in these women only. (Table No. 2) For this study, two types of wounded cases were registered – one those who had gone episiotomy operation and another who got wound due to perineal tear. We also noticed the difference, if any, in pattern of wound healing in episiotomy wound and perineal tear wound. (Table No. 3). We also noticed that there is no significant difference in healing pattern of wound of episiotomy and perineal tear cases. (Table No. 5, 6, 7, 8). There is no significant difference between Goup I, II and III. Women of all groups who had proper wound union, also had normal Vrana vastu (scar) formation. (Table no.8)

#### CONCLUSIONS

According to Ayurdeda vrana is defined as phenomena in which the destruction of tissues occurs and on healing leaves behinds leaves behind a scar which remains for whole life time of the individual. If it is identity in initial stage of Kriya Kala complications will be reduces. Wound is regarded as easily curable if it arises in skin and muscle, easy place, youthful age, without complication means diagnosed in initial stage of Kriya Kala i.e. Sanchaya. But it is also true if proper management is not done, the wound may get infected and these interfere with healing process. So, as far clean wound is concerned, all the efforts should be made to keep it free from interfering factors for wound healing. Application of Jatayadi -Taila on perineal wound and Yoni Prakshalan with Triphala *Quath* is the attempt in same direction. Dressing with Jatyadi Taila and antiseptic ointment is almost equally effective. Oral medication has got doubtful role in healing of clean wound. There is no difference of wound healing in episiotomy wound and wound made by perineal tear. Yoni- Prakshalan with plain water or Triphala Quath is equally effective in removing the debris from perineal wound but if the Quath is not filtrated properly, chances of secondary infection increased.

# **REFERENCES**

- Alteimer, W.A. Surgical infection, incision wounds. In: Hospital Infection: Boston: Little Brow and Co. 1979.
- 2. Badami C., Daulatabad C. D., Component acids of Pongamia glabra seed oils. J Karnataka Univ Sci., 1962; 12:41.

- 3. Bhawaswar, G.C. Guru, L.V. and Chadda, A.K. Antibacterial activity of some indigenous medicinal plants. Med. Surg.1965; 5-11.
- 4. Benyon, C. L. Midine episiotomy as a midline procedure. J obset Gynaecol Br Common.1974; 81-126.
- Bernaord, H.R., Cole, W.R. The prophylaxis of surgical infection. The effect of prophylaetic anti microbial drugs on the incidence of infection following potentially contaminated operations. Surgery 1964; 56-151.
- Buekens, P. Layasse R., Dramaix M., Wollast, E. Episiotomy and third degree tears. Br J Obstet Gynaecol 1865; 92: 820-823.
- 7. Chopra, R.N.I.C., Honda, K.L.; Chopra. S. Indigenous drugs of India (Ed.) Unn. Dhar and Sons Pvt.Ltd.
- 8. Chakraborty, H.L. Herbal heritage of India. Bull Bot Soc Beng.1975; 29:- 97.
- 9. Chvpill, M, Koopman, C.F. Age and other factor regulating wound healing.1983.
- 10. Diwakar, N. G., Rao, J. V. R. Screening of flowers of Jasminum: species for indole. Indian perfume .1983; 24-46.
- 11. Dumphy, J. E. The healing of wounds. Can J Surg.1957; 10-281.
- 12. Dumphy, J. E. Udupa, K. N., Edward L. C. Wound healing a new perspective with particular reference to ascorbic acid deficiency. Ann Surg. 1956; 144: 304-319.
- 13. Freidman, E.A. Labor .Cinical evaluation and management. 2<sup>nd</sup> ed. New York Appleton; 1978.
- Findlay, L. W., Howes, E.L. Cortisone effect on Wound in a rabbit. New Eng. J Med 1952; 246-597.
- Gass , M. S. , Dunn , C. styes, S. J. Effect of episiotomy on the Frequency of vaginal outlet 1acerations. J Report Med 1986; 31-240.
- Gould, S., Bernard. Ascorbic acid and collagen fibriformation vitamin and hormones. New York,. Academic Press 1: 17-89.
- 17. Haadem, K, Ohrlander, S, lingman. Long term ailments due to anal sphincter rupture caused by delivery a hidden problem. Eur J Obstet Gynaecol Repred Biol 1988; 27:27-32.
- Mille, T.A. The healing of partial thickness skin injuries. In: Hunt, T.K. ed. Wound healing and infection. Appleton- century Crafts. New York. 1980; p. 81-86
- 19. Nadkarni, K.M. Indian Materia Medica: 1-2.

- Postlethwaite, A.E. Kang, A.H. Fibrobalsts in inflammation Basic Principles and clinical correlations. New York. Raven Press; 1988. p. 577.
- 21. Odel, L.O., Seski, A. Episiotomy blood loss. Am J Obster Gynaecol 1947; 54: 51.
- 22. Reynolds, J.L., Yudkin P.L. Changes in the management of labour: II Perineal Management. Can Med Assoc J 1987; 136: 1045.
- 23. Roystone, G.D. Repair of Complete perineal laceration. Am J Obstet Gynaecol 1930; 19-185.
- 24. Shion, O.P. Klobanoff, M.S. Carey, J.C. Midline episiotomy i.e. more harm than good? Obstet Gyanecol 1990; 75: 765-770.
- Sleep, J., Grant, A., Gracia, J. Elbourne, D., Spencer, J. Chalmers, I. West Berkshire perineal management trial. Br Med J Clin Res 1984; 289: 587-590.
- 26. Harding Reins, A., Mann, Cherles, V. The healing and management of wound: Oailey and Love's short practice of surgery.
- 27. Jain, S. K. Medicinal plant lore of the tribals of Bastar. Econ Bot.1965; 19-236.
- 28. Kalstreider, D. F., Dixon, D. M. A study of complete lacerations following central episiotomy. South Med J 1948; 41-814.
- Kritikar , K. R. , Basu . B. D. Indian medicinal plant: M/S Periodical Experts, D-42 .Delhi; Vivek Vihar; 1984.
- 30. King, G. D. Salzman, F. A. Keloid scars, Surgical clinics of North America .1970; 50 595.
- Locacio , S. A. ,Casale , W. Hinton , J. W. Wound healing experimental and statistical study III Exp. Observation. Surg Gyne Obst.1943; 77 376.Leading article. Burst abdomen. British Med J 1972; 4-4.
- 32. Leading article. Zinc in human medicine .Lancet' 1975; 2: 35.

- 33. Limaye, D. B. Karmjin a crystalline constituent of the oil from Pongenia glabra secd. Part I Proc Indian Sci Cong.1975;p. 118.
- 34. L. Jungguist, U. Wound sepsis after clean operations. Lancet.1964; l: 1095-1097.
- Mukerjee , S. K. and Seshadri , T.R. Chemistry of Pongamol Part III. Synthetis J. Chem Soc 1955; 2048.
- Thackes, S.B., Banta, H.D. Benefits and risks of eposiotomy An interpretive review of the English language literature 1860-1980. Obstet Gynaecol Surv 1978; 38:-23.
- Thranov, I., Kringelback, A.M., Melchior, E., Olsen,
  O. and Damsgaard, M.T Post-Partum symptoms.
  Episiotomy or tear at vaginal delivery.
  Acta Obstet Gynaecol Scand 1990; 69: 11-15.
- 38. Walter, J.B. `, Israel, M.S. Wound healing, General Pathology.1988.
- 39. Wiancko, K.B., Kling, S., Mackamie, W.C. Wound healing- incidions and Suturing. Can Med Assoc J 1961; 84: 254.
- 40. Bhavprakash nighntu Guduchyadi verg. In Ganga sahay pandey and K.C. chunakar (eds) choukhambha bhartiya Academy; reprint 2009. P.271
- 41. Sharma PV. Dravyaguna Vijnana vol-214thed. Varanasi Chaukhamba Bharati Academy; 1978.p.149-51.
- 42. Agnivesha, Yajjpurishiya Adhyaya, In Sharma RK. Das Bhagwan Charaka Samhita vol 1, reprint edition Chaukhamba Bharati Orientalia ;2006.p.495.
- 43. Sushruta, Vrana Prashniya Adhayay, Sushruta. Samhita .In Sharma PV.(eds) Vol 2 Chaukhambha Bharati Academy; Publications; 2005.p. 92-94.

**Table 1:** Showing age incidence in all the groups

| S.No. | Age Group | Group I     |    | Group II     |    | Group III   |    |
|-------|-----------|-------------|----|--------------|----|-------------|----|
|       | (Years)   | No. of case | %  | No. of cases | %  | No.of cases | %  |
| 1.    | 20-30     | 17          | 85 | 18           | 90 | 18          | 90 |
| 2.    | 31-40     | 3           | 15 | 2            | 2  | 2           | 2  |

P > 0.05

17(85%) of group I , 18(90%) of group II , and group III was the number of women registered for study . Only 3(15%) women of group I , 2(10%) women of group II and group III were of the age more than 30 years . The comparison between group I, II and III shows no significant difference. (Table No. 1)

Table 2: Showing parity in all the groups

|       |              | Group I     |    | Group II     |    | Group III   |    |
|-------|--------------|-------------|----|--------------|----|-------------|----|
| S.No. | Parity       | No. of case | %  | No. of cases | %  | No.of cases | %  |
| 1.    | Nulli parous | 15          | 75 | 10           | 50 | 11          | 55 |
| 2.    | Multi parous | 5           | 25 | 10           | 50 | 9           | 45 |

P > 0.05

As 15 (75%), 10 (50%), 11 (55%) women were primigravida of groups I, II, III, respectively, 5 (25%) women of group II and 9 (45%) women of group III were the multigravida. This parity comparison in between all the groups was not significant. (Table No. 2)

**Table 3**: Showing nature of operation in all groups

| S.No. | Nature of operation | Group I      |    | Group II     |    | Group III    |    |
|-------|---------------------|--------------|----|--------------|----|--------------|----|
|       |                     | No. of cases | %  | No. of cases | %  | No. of cases | %  |
| 1.    | Episiotomy          | 13           | 65 | 11           | 55 | 14           | 70 |
| 2.    | Perineal tear       | 7            | 35 | 9            | 45 | 6            | 30 |

p > 0.05

Majority of women in all groups, i.e. 13 (65%) of group I, 11 (55%) of group II and 14 (70%) of of group III received episiotomy operation while 7 (35%) women of group I , 9 (45%) women of group II and 6 (30%) women of group III were having perineal tear.( table no.3)

**Table 4:** Showing status of wound on the basis of various clinical features on first post – operative day

|       | Group     | Vedana      |     | Varna        |   | Shopha      |     | Srava        |   |
|-------|-----------|-------------|-----|--------------|---|-------------|-----|--------------|---|
| S.No. |           | No. of case | %   | No. of cases | % | No.of cases | %   | No. of cases | % |
| 1.    | Group I   | 20          | 100 | -            | - | 20          | 100 | -            | - |
| 2.    | Group II  | 20          | 100 | -            | - | 20          | 100 | -            | - |
| 3.    | Group III | 20          | 100 | -            | - | 19          | 95  | -            | - |

p > 0.05

On examination the wounded women on various symptoms after 24 hr of delivery, we found almost all the women had moderate degree of *vrana vedana* in all group.mild *shopha* was present in 20(100%)women of groups I and IIand 19(95%)of groups III. *Srava* from the Vrana and discoloration of skin were absent in all women of groups. (Table no.4)

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