

## REVIEW OF CLINICAL STUDIES ON CERVICAL EROSION (GARBHASHAYA GRIVAMUKHAGATA VRANA)

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### ABSTRACT

At present developing era day to day practice suggested that maximum number of cases of *Garbhashaya Grivamukhagata Vrana* (cervical erosion). Its prevalence is more than 50% of all the gynecological conditions. It is a major problem for gynecologists and hazards effect of cervical erosion are also life disturbing, whole reproductive process can be checked by it that's why it is necessary to pay immediate attention towards this most troublesome disease. Cervical erosion is the core of *Stree Roga* subject. On cervical erosion total 8 works in PG level has been completed out at Institute for Post graduate Teaching & Research in Ayurveda (IPGT & RA), Gujarat Ayurveda University, Jamnagar. Out of 8 research works, 4 works are on *Agnikarma* (cauterization), 1 work on *Kshara Karma* (application of caustics), 3 works are on *Avachurnana* (sprinkling of Powder) and 3 works are on electric cauterization. The drugs and procedures used in the research works have *Vrana Ropana* (ulcer healer), *Shodhana* (ulcer cleansing), *Prasadana*, *Kushtaghna* (anti-dermatosis), *Kandughna* (anti-pruritic) properties. All works are carried out on *Bahya Parimarjana* (external application) this facilitate enhanced drugs effect for early and uncomplicated wound healing.

**Keywords:** Cervical erosion, *Garbhashaya Grivamukhagata Vrana*, *Stree Roga*

### INTRODUCTION

The woman is said to be three times more responsible than the male in the reproduction. She has to bear the reproduction and bringing up of children. For those she should be in the perfect healthy condition particularly reproductive healthiness. Owing to complicated structure of the female body, women are subject to a large number of complaints connected with genital organs. These ailments are frequently of an extremely distressing character. Apart from attending natural processes of menstruation, pregnancy, one of the most inconvenient diseases is *Garbhashaya Grivamukhagata Vrana* (cervical

erosion) with symptoms of discharge per vagina, itching vulva, burning vulva, backache, infertility and ultimately leads to psychological problems.<sup>[1]</sup> Cervical erosion is a common condition seen in most women of all the age groups. About 85% women suffer from the cervical erosion i.e. benign condition of female genital tract during their lifetime<sup>[2]</sup>. It is asymptomatic in initial stage but later on it progresses to show many symptoms like white discharge, itching vulva, dyspareunia etc. It adversely affects the physiological & psychological health of women & even interferes in their professional life. It may even

lead to infertility<sup>[3]</sup>. It can show malignant changes in chronic stage<sup>[4]</sup>. Majority of symptoms present in Cervical erosion are described under *Yoniroga (Yonivyapad)* and *Vrana* in *Ayurveda*.

Cervical erosion can be considered as *Garbhashaya Grivamukhagata Vrana* as it resembles the features of *Vrana* as explained in the classics. In *Ayurvedic* classics no direct description of *Garbhashaya Grivamukhagata Vrana* is available, but *Ashtanga Sangraha* has described it in reference of *Yoni Vranekshana Yantra*<sup>[5]</sup>. Considering the features of cervical erosion, it can be stated that it is usually *Nija/Agantuja, Kapha-Pittaja, Twaka-Mamsaja* type of *Vrana* which occurs at *Griva* of *Garbhashaya* (cervix).

*Acharya Sushruta* has devoted a special chapter for management of *Vrana* in which he has explained the management of *Doshaja Vrana* from the initial stage of *Vrana Shotha*<sup>[6]</sup>. Most commonly treatment used according to modern science is cauterization and cryosurgery.

#### **AIMS & OBJECTIVE**

- To know various research drugs and procedures on cervical erosion carried out at Institute for Post graduate Teaching & Research in Ayurveda, Jamnagar.
- To provide the guidelines for further research works in the area of cervical erosion.

#### **MATERIALS AND METHOD**

All the theses were collected from Department of Streeroga & Prasootitantra at Institute for Post graduate Teaching & Research in Ayurveda, Gujarat Ayurveda University, Jamnagar and the titles are procured from "Ayurvedic research database"<sup>[7]</sup>.

**Method:** Hand search.

The procured theses were studied in detail and scientific review was done.

#### **OBSERVATION**

On cervical erosion total 8 works at PG level have been carried out from the Institute for Post Graduate Teaching & Research in Ayurveda (IPGT & RA). Out of 8 research works, 4 works were on *Agnikarma* (cauterization), 1 work on *Kshara Karma* (application of caustics), 3 works are on *Avachurnana* (sprinkling of Powder) and 3 works are on electric cauterization. The details of clinical trials are in following paper.

#### **Poornima Hopp (1977):**

In this study 20 patients were treated with first *Brihat Jatyadi kwatha Yoni-Dhavana* and later *Pichu* of *Brihat Jatyadi Taila* was kept on *Vrana* for 7-30 days depending upon condition of cervical erosion. The study showed 65% patients cured, 25% patients got symptomatic relief while no relief in 10% of patients. Author opines along with local application if oral drugs were given then results have been more hopeful.<sup>[8]</sup>

#### **Mukta P. Makani (1981):**

Efficacy of *Indrayanamoola* was tested on 20 patients. *Indrayanamoola* mixed with water and applied locally with the help of a glass rod. Treatment was given once daily for 3 days. The drugs shown good effect on erosion as out of 20 patients 14 (70%) patients showed complete relief from this condition.<sup>[9]</sup>

#### **Ramveer Sharma (1988):**

In this study 37 patients were treated in 3 groups. In Group A (n-12) *Agnikarma* with galvanocautery done. In Group B (n-6) same treatment as group A and in addition clusteral ointment (contained-*Udumbaradi Taila*<sup>[10]</sup>, *Ashwastha*, *Udumber*, *Khadira*, *Raktachandana*, *Tuttha*) applies on eroded area and *Pradarantaka Vati*(contained-*Pradarantaka Rasa*<sup>[11]</sup>, *Ashoka*, *Amalaki*, *Yastimadhu*, *Lodhra*, *Shatavari*, *Dhataki*, *Nagakesara*, *Shuddha Rasanjana*, *Kukku-*

tanda Bhasma) orally in the dosage of 1gm 3times a day for 60 days. In Group C (n-19) local application of Clusterol ointment and Pradarantaka Vati orally were administered. The significant result was found in all the groups in healing the erosion;

hence the Pradarantaka Vati and clusteral ointment may be alternatively used in place of cauterization [12]. (Table-1)

**Table-1 Ramveer Sharma- Overall effect of Therapies on symptoms of Cervical Erosion**

symptoms	Group A % Relief			Group B % Relief			Group C % Relief		
	Re-lief	Par-tial relief	No Chang e	Re-lief	Par-tial relief	No Chang e	Re-lief	Par-tial relief	No Chang e
<i>Katishula</i>	50	-	50	75	25	-	66.6	33.3	-
<i>Angmarda</i>	62.5	12.5	25	75	-	25	68.6	31.4	-
<i>Mutrada-ha</i>	-	-	100	-	100	-	83.3	16.7	-
<i>Yonidaha</i>	33.3	-	66.6	-	-	-	100	-	-
<i>Yonoshula</i>	50	-	50	75	25	-	57.4	14.2	28.4
<b>White discharge</b>	66.7	8.3	25	100	-	-	84.2	10.5	5.3
<b>Cervical Erosion</b>	75	8.3	16.6	100	-	-	73.7	15.7	10.5

**Sangita Karlekar (1998):**

In this work 35 patients were treated into 3 groups. In group A (n-15) with *Panchavalkala Kwatha Prakshalana* followed by *Nishadi Churna (Haridra, Chandana, Yas-timadhu) Avachurnana* in the dusting mode once/day for 15 days. In Group B (n-12) the treatment was same as in group A and in addition oral tablets G-9(*Shilajita, Bangabhasma, Kasisabhasma, Bibhitaka, Amlaki, Yastimadhu, Kutaja, Amramaj-ja, Madayantika*) 500mg thrice a day with *Koshna Jala* for 1 month. In Group C (n-8)

*Agnikarma* with the help of Galvanometric cautery machine point. The study concluded that for 1<sup>st</sup> degree erosion and sized (26-50%) only local treatment is adequate. For 2<sup>nd</sup> degree and medium sized erosion (51-74%) both local & oral i.e. combined therapy are required and for 3<sup>rd</sup> degree and large sized (75-100%) erosion *Agnikarma* is helpful. [13] (Table-2)

**Table-2 Sangita Karlekar- Overall effect of Therapies on symptoms of Cervical Erosion**

symptoms	Group A % Re-lief	Group B % Re-lief	Group C % Re-lief
<b>P/V discharge</b>	94.71	96.42	83.97
<b>Low backache</b>	24.81	63.15	66.66
<b>Itching vulvae</b>	52.83	100.00	91.66
<b>Burning vulvae</b>	30.5	91.66	100.00
<b>Burning micuration</b>	33.33	100.00	100.00
<b>Cervical erosion- Size</b>	43,37	85.71	66.71
<b>-Appearance</b>	43.20	96.00	72.20

**Asha Rout (2002):**

Specific line of treatment was tested in this study on 24 patients in 2 groups. In Group A (n-12) Agnikarma by Vrana-Ropaka Shalaka (Prepared by Haridra, Yastimadhu, Nimba & Amalaki) and then local application of Udumbara Taila as Pichudharana (for 15 days) were performed. In Group B (n-12) Ksharakarma by Snuhikshara and then local application of Udumbara Taila as Pichudharana (for 15 days)

were applied. The study concluded that Vrana-Ropaka Shalaka along with Udumbara Taila Yonipichudharana causes reduction of erosion along with complete symptomatic relief. In total Agnikarma and Ksharkarma can be better alternative of effective treatment in cervical erosion especially Agnikarma.<sup>[14]</sup>(Table-3)

**Table-3 Asha Rout- Overall effect of Therapies on symptoms of Cervical Erosion**

Symptoms	No. of patients	Group A % Relief	No. of patients	Group B % Relief
<i>Yonitaha Srava</i>	9	68.92	9	73.49
<i>Katishula</i>	9	64.51	9	73.49
<i>Yonikandu</i>	9	75.18	9	64.51
<i>Yonidaha</i>	9	20	9	-
<i>Maithunkastata</i>	9	78	9	-
<b>Vaginal PH</b>	9	72.95	9	72.95
<b>Cervical Erosion</b>	9	83.45	9	71.61
<b>Cervical Tenderness</b>	9	86.96	9	66.66

**Meena Bhayal (2003):**

In this study Agnikarma (Cauterization)[Group A] and Avachurnana (sprinkling of Powder)[Group B] modality in one sitting were tested on the patients of cervical erosion (n-50). For Agnikarma, a Shalaka was prepared out of Haridra, Yastimadhu, Nimba, Karanja & Amalaki. For Avachurnana Dhatrinishadi Churna was used. Before the both procedures Nimba

Patra Kwatha Prakshalana (Douche) was done in both groups. Agnikarma therapy showed better relief in signs of Garbhasaya Grivagata Vrana. Hence in symptoms better result observed in Avachurnana Group then Agnikarma.<sup>[15]</sup> (Table-4)

**Table-4 Meena Bhayal- Overall effect of Therapies on symptoms of Cervical Erosion**

Symptoms	Group A % Relief	Group B % Relief
<i>Yonitaha Srava</i>	72.27	77.02
<i>Katishula</i>	67.74	65.14
<i>Yonikandu</i>	66.67	83.82
<i>Yonidaha</i>	71.43	100
<i>Mutra Daha</i>	80	71.4
<i>Vaginitis</i>	66.67	74.39
<b>Cervical Erosion appearance</b>	66.67	53.76

**Jasmin Kazi (2005):**

Agnikarma and cauterization were occupied for the treatment of *Garbhashaya Grivamukhagata Vrana* in 33 patients. The patients were studied into 3 groups. In Group A (n-14) with Agnikarma by *Shalaka* prepared from *Haridra, Yastimadhu, Nimba, Karanja & Amalaki* then *Jatyadi Taila Pichu* was applied per vagina once a day for 7 days, in Group C (n-11) with

electric cauterization and in Group P (n-8) with placebo. The study concluded that *Agnikarma* therapy showed better relief in signs than Electric cauterization and also better results was obtained in 1<sup>st</sup> and 2<sup>nd</sup> degree of cervical erosion.<sup>[16]</sup> (Table-5)

**Table-5 Jasmin Kazi- Overall effect of Therapies on symptoms of Cervical Erosion**

Symptoms	Group A % Relief	Group C % Relief	Group P % Relief
<i>Yonitaha Srava</i>	81.63	7.14	-22.12
<i>Katishula</i>	78.72	40.81	25.00
<i>Yonikandu</i>	91.25	30.00	50.00
<i>Udara Shula</i>	71.67	40.00	-19.76
<i>Mutra Daha</i>	85.71	42.10	7.56
Cervical Erosion appearance	90.00	39.44	15.34
Cervical Erosion Degree	87.79	37.89	23.31

**Hemalata Chimte (2012):**

Total 31 patients of cervical erosion were registered and divided into 2 groups. In Group A (n-16) Agnikarma with *Swarna Shalaka* done and After that *Yastimadhu* powder mixed with *Ghritha* as required was applied over the wound once a day for a week. In Group B (n-15) Agnikarma with *Karanjadi Shalaka* done and After that *Yastimadhu* powder mixed with *Ghritha* as required was applied over the wound once a day for a week. The study concluded that

both *Swarna Shalaka* and *Karanjadi Agnikarma Shalaka* had shown encouraging results on Cervical erosion but due to better and early healing in addition to the convenience of use, *Swarna Shalaka* is better for Agnikarma in case of *Garbhashaya Grivamukhagata Vrana* (Cervical erosion).<sup>[17]</sup> (Table-6)

**Table-6 Hemalata Chimte- Overall effect of Therapies on symptoms of Cervical Erosion**

Symptoms	Group A % Relief	Group B % Relief
<i>Yonitaha Srava</i>	74.36	55.88
<i>Katishula</i>	82.86	56.25
<i>Yonikandu</i>	89.29	61.29
<i>Yoni Daha</i>	94.12	58.82
<i>Mutra Daha</i>	87.5	56.25
% Area of erosion	97.30	77.14
Cervical Erosion appearance	74.36	57.14

## DISCUSSION

Cervical erosion warrants urgent attention of the gynecologists as it effects ladies of child bearing age and there by upsets the patient's psychologically. If it is asymptomatic and physiological then needs no treatment. But when it is symptomatic and infected then the treatment is needed. Modern treatment for cervical erosion is cauterization & cryosurgery which have their own side effects like secondary infertility, bleeding per vagina, infection, stenosis etc [18]. That is why traditional system of medicines is getting valued and the traditional methods are searched for their medical used.

On reviewing the theses works, the following points can be noted down. Many procedures and drugs were tested for cervical erosion. Maximum works were done on *Agnikarma* by *Shalaka* prepared with various drugs which have *Vrana Shodhana*, *Ropana* and *Prasadana* properties which yield good results in healing the wound. Treatment plan for *Garbhashaya Grivamukha Gata Vrana* was restricted to *Srava*, *Shotha* and *Vranaropana*. Some local preparations like *Brihat Jatyadi Taila*, clusteral ointment, *Udumbara Taila* and oral formulation like *Pradarantaka Vati* and G-9 having wound healing properties were tested. Majority of research works were done on local application, 4 works on *Agnikarma*, 1 work on *Kshara Karma*, 3 works on *Avachurnana* and 3 works on electric cauterization. All the works were clinical. In comparison of *Agnikarma* by *Karanjadi Shalaka* and *Suvarna Salaka*, *Suvarna Salaka* got better result and more convenience to use.

## CONCLUSION

All the research works mainly were targeted for finding a best *Shodhana* and *Ropana* drugs for cervical erosion. Maxi-

mum works were done on *Agnikarma* due to its good effect on cervical erosion. Due to the therapeutic heat applied at affected part, the blood circulation is increased leading to the proper nutrition of the tissue which also flushes away the infective & inflammatory substances. The drugs used in *Agnikarma* and local preparation have *Vrana Ropaka* (ulcer healer), *Shodhaka* (ulcer cleansing), *Kushthaghna* (anti-dermatosis), *Krimighna* and *Kandughna* (anti-pruritic) which helps in healing of *Vrana* (erosion). All works were carried out on *Bahya Parimarjana* (external application) this facilitate enhanced drugs effect for early and uncomplicated wound healing.

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