# EFFICACY OF AGNIKARMA WITH SWARNA SHALAKA IN THE MANAGEMENT OF GARBHASHAYA GRIVAMUKHGATA VRANA (CERVICAL EROSION)

<sup>1</sup>Dr. Neha Mamgain, <sup>2</sup>Dr. Hemlata Chimate <sup>1</sup>Assistant Professor, <sup>2</sup>Assistant Professor Department of Prasuti Tantra Avum Stri Roga, Uttrakhand Ayurveda University, Main Campus, Dehradun, India.

#### **Abstract:**

Cervical erosion is a frequent finding in patients attending gynecologic OPD and the symptoms presented are sometimes very troublesome due to its chronicity and nature of recurrence. It is the replacement of the stratified squamous epithelium of the ectocervix by the columnar epithelium of endocervix. The clinical presentation of cervical erosion, can be correlated with Garbhashaya Grivamukhagata Vrana. The study was taken to evaluate the effect of Agnikarma with Swarna Shalaka on Garbhashaya Grivamukhagata Vrana. Total 18 patients were registered from OPD of Stree Roga and Prasuti Tantra Department and were treated with Agnikarma by Swarna Shalaka. One sitting was given after 7<sup>th</sup> day of menstruation and the patients were followed up for one month. The effect of therapy was assessed on the basis of relief in signs and symptoms for which a special scoring pattern was designed. The result shows that Agnikarma is an effective procedure for the management of cervical erosion, and Swarna Shalaka is a convenient medium having high efficacy in reliving the symptoms of erosion and no apparent evidence of complications. So this may be positively helpful in treating the cervical erosion.

Key Words: Garbhashaya Grivamukhagata Vrana, Cervical erosion, Agnikarma, Swarna Shalaka.

## **Introduction:**

Cervical erosion is a common condition seen in most women of all the age groups. Its prevalence is more than 50% of all the gynecological conditions<sup>1</sup>. It is asymptomatic in initial stage but later on it progresses to show many symptoms like white discharge, itching, dyspareunia etc. It adversely affects the physiological & psychological health of women & even interferes in their professional life. It may even lead to infertility<sup>2</sup>. Majority of symptoms present in cervical erosion are described under *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 Astanga Sangraha Su.34/9 has described it in reference of Yoni Vranekshana Yantra<sup>3</sup>.

<sup>1</sup> www.bbb110.cn/health/com

<sup>&</sup>lt;sup>2</sup> Vaclav insler & Bruno lunenfeld, Infertility; Male & Female Churchill Living Stone, @nd Addition 1993 Diagnosis & Classification of sperm – mucus interaction pg no .345

<sup>&</sup>lt;sup>3</sup>Vagbhatta, Ashtanga Samgraha Vol.1, Sutra Sthana 34/9, with Hindi Commentary by Kaviraj Atrideva Gupta foreword by Rajvaidya Pandit Sri Nandakishor Sharma Bhishagacharya, Chaukhambha Krishnadas Academy, Reprinted 2005, Chaukhambha Press,

Modern treatment for cervical erosion is cauterization & cryosurgery which have their own side effects like secondary infertility<sup>4</sup>, bleeding per vagina, infection, stenosis etc<sup>5</sup>. This may further destroy the healthy tissues.

In Ayurveda, Agnikarma has been described by Acharya Sushruta in Sutra Sthana while describing the treatment of Vrana<sup>6</sup>.

Garbhashaya Grivamukhagata Vrana is Twak-Mansagata Vrana. Hence, it is a clear cut indication for Agnikarma<sup>i</sup>.

According to Yogaratnakara (Uttarakhand, Bhagandar Chikitsa), Swarna Shalaka has been indicated for Agnikarma in Apana margagata pitika<sup>7</sup>. Also Swarna has Vranaghna, Lekhana, Tridoshahara, Varnya Guna, Garahara, Krimihara, Rasayana and Vishnashana properties.

Keeping all these points in mind a study of *Agnikarma* with *Swarna Shalaka* in the management of *Garbhashaya Grivamukhagata Vrana* (Cervical erosion) has been undertaken.

## Aims and Objectives:

- To study the detailed etiopathogenesis, prevalence & complications of *Garbhashaya Grivamukhagata Vrana* (Cervical erosion).
- To evaluate the clinical efficacy of *Agnikarma* procedures by using *Swarna Shalaka* in *Garbhashaya Griva mukhagata Vrana* (Cervical erosion).

#### **Materials and Methods:**

## Plan of study:

Diagnosed patients of *Garbhashaya Grivamukhagata Vrana* were registered from the O.P.D. of the Department of *Stree Roga & Prasooti Tantra*, I.P.G.T. & R.A. Jamnagar. Case selection was random irrespective of their cast and socioeconomic considerations.

## **Inclusion criteria:**

- Married women in between 20 60yr age group were selected.
- Patients with clinical signs and symptoms of *Garbhashaya Grivamukhagata Vrana* (Cervical erosion) were taken in to study after Pap smear test.

## **Exclusion criteria:**

- Unmarried women were excluded.
- Women below 20 yrs and above 60 yrs were excluded.
- Pregnant women & lactating mothers were excluded.
- Patients with following chronic illness were excluded from study -

Varanasi.pg. no.123

<sup>4</sup> Vaclav Insler & Bruno Lunenfeld, Infertility; Male & Female Churchill Living Stone, @nd Addition 1993 Dignosis & Classification of sperm – mucus interaction pg. no.345

<sup>5</sup>D.C. Dutta, Benign lesions of the cervix in Text Book of Gynaecology including contraception, New Central Book Agency (P)Ltd. 5<sup>th</sup> edition,2008 reprint: 2009 pg. no.258

<sup>6</sup>Sushruta, Sushruta Samhita of Mahrshi Sushruta, Sutra Sthana 12/10, edited with Ayurveda-Tattva-Sandipika Hindi Commentary, scientific analysis, notes etc. by Kaviraja Ambikadutta Shastri, Reprint edition,2006, publisher: Chaukhambha Bharti Academy, Varansi.pg. no-39.

<sup>7</sup>Dr. Indradev Tripathi & Dr. Daya Shankar Tripathi , Yogaratnakara with Vidyotini Hindi Commentary, Bhagander - Chikitsa Adhaya Sloka no.12 Uttarardha, Yoni Rogadhikara, edited by Krishnadas Academy, publisher Chaukhambha Sanskrit Series Office, 1st edition 1998 Krishnadas Academy, Varanasi. Pg. no-630

- ✓ Tuberculosis of cervix.
- ✓ Cervical polyp.
- ✓ Carcinoma of cervix.
- Other chronic debilitating disorders such as TB, DM, etc. were excluded.

## Criteria for diagnosis:

- Through proper history & examination.
- Cervical erosion confirmed by per speculum examination.
- Patients having complaints of white discharge, backache, itching in vagina and/or post coital bleeding were considered only if these were accompanied with presence of cervical erosion.
- For chief complaints a scoring pattern was adopted for diagnosis and assessment.

## **General investigations:**

 Routine hematological and urine examination was carried out in all the patients before and after the course of treatment.

## **Specific investigations:**

• Pap smear test was done to assess any malignant changes in cervical epithelium, before the treatment for exclusion of patients.

## Study design:

An open random clinical trial method has adopted for the study and it has done after due clearance from the Institutional Ethical Committee. Total 18 diagnosed patients of *Garbhashaya Grivamukhagata Vrana* were registered.

## Treatment protocol: Table: 1 Posology

Drug & Instruments	Swarna Shalaka
Duration	One sitting after 7 <sup>th</sup> day of menstrual period
Procedure	After all aseptic precautions, the tip of Swarna Shalaka was heated on flame, by the help of spirit lamp, then Bindu type of Agnikarma was applied over the area of Cervical erosion. After that Yastimadhu powder mixed with Ghrita as required was applied over the wound once a day for a week.
Route	Local

## Advice:

- To avoid intercourse during the course of treatment.
- To avoid spicy, fried, bakery items and fermented items and over eating.

## Criteria for assessment

**Subjective parameter:** The effects of therapy in the patients were assessed mainly on the basis of relief in the signs and symptoms of the disease and improvement in general health through a specially prepared scoring pattern.

A special **scoring pattern** was adopted for the sign as follows:

- 1. **Site** According to the site of erosion, whether it is seated at upper lip/ lower lip/ around OS/overall.
- 2. **Size** Actual size of erosion was measured with the help of % scale.
  - $\checkmark$  Due to deep seated part of body.
  - ✓ So according to % scale system each lip is 50 %, among Rt & Lt half are also considered as 25% each. So 25% / 50% / 75% / 100%

#### Table:2

Sr.No.	% of Area of Erosion	ВТ	AT	Grade
1	00-25%			0
2	26-50%			1
3	51-75%			2
4	76-100%			3

## 3. **Type** –

- a. Simple Flat
- b. Papillary
- c. Follicular
- 4. Appearance –

Table: 3

Sr.No.	Appearance of cervix/colour of Erosion	BT	AT	Grade
1	White colour / Normal tissue / No discharge	1		0
2	Pink / Granulation tissue complete / Slight discharge			1
3	Red / No granulation / moderate discharge	1	(V) "	2
4	Deep red / no granulation / cervix embeded in discharge.		Alika	3

## 5. Degree/Grade 1 –

- ✓ Superficial involvement of mucous membrane
- ✓ Pink to red colour
- ✓ Slight tender / No tender
- ✓ No excessive discharge

## Grade 2 -

- ✓ Deep involvement of eroded area i.e. involvement of fibrous coating.
- ✓ Red colour
- ✓ Cervix tenderness + moderate.
- ✓ Discharge moderate.

## Grade 3 -

- ✓ Very deep involvement of eroded area i.e. involvement upto superficial muscle part.
- ✓ Deep red colour
- ✓ CX tenderness ++ severe
- ✓ Discharge excessive

## Criteria for the assessment of overall effect of the therapy:

The total effect of treatment was assessed in the terms of marked improvement, moderate improvement, mild improvement and no change.

## Table:5

• 25% changes in the signs and symptoms	No change
26-50% relief in the signs and symptoms	Mild improvement
51-75% relief in the signs and symptoms	Moderate improvement
76-100% relief in the signs and symptoms	Marked improvement

#### Statistical estimation of results:

The obtained data was analyzed for statistical significance by using Wilcoxon's Signed-Rank Test. The level of 'P' between 0.05 to 0.01, and P<0.001 was considered as statistically significant and highly significant respectively. The level of significance was noted and interpreted accordingly.

## Follow up:

Every 15 days for 1 month follow up was done and further recurrence in the signs & symptoms were recorded.

## **Observation & Results:**

• 18 patients of cervical erosion were registered and Out of them 16 patients had completed the course of therapy while 2 patients discontinued the treatment course. In present study most of the patients (60%) were belonging to the age group of 20-30yrs and (51.43%) patients were belonging to lower middle class. Observation of chief complaints in the present study showed that maximum patients were having *Yonitah Srava* (100%), *Yoni Kandu* (100%) and *Yoni Daha* (57.14%). Also most of patients complained of *Katishoola* (100%), *Mutradaha* (68.57%), *Maithuna pashchat Raktasrava* (22.86%), *Udarshoola* (20%) and Cervical tenderness (11.43%). Maximum patients had chronicity of 1-2 year (51.43%) and had previous history of consuming modern medicine orally (68.57%) or using vaginal suppository or cream (65.71%). Frequency of intercourse was more than3-4 times/week (82.86%) and (42.86%) were using condoms for contraception. During **per speculum examination** maximum patients had Hypertrophied cervix (57.14%) and cervicitis (100%). Cervical erosion examination showed that 71.43% patients had 51 – 75% size of Cervical erosion, 60% patients had grade 2 appearance, 57.14% patients had simple flat type. Cervical erosion was found covering overall cervix in 85.71% patients and grade 3 erosion was found in 60% patients.

## **Effect of therapy:**

Table-6: Effect of Agnikarma with Swarna Shalaka on chief complaints of 18 patients of Garbhashaya Grivamukhagata Vrana.

Sr.No.	Chief compleints	o. Chief complaints		Mean	Score	% of Relief	Wilcoxon	р
31.110.	Cilier complaints	11	BT	AT	% of Keller	No.	Г	
1	Yonitah Srava	16	2.438	0.6250	74.36	136	< 0.001	
2	Yoni Kandu	16	1.750	0.1875	89.29	136	< 0.001	
3	Yoni Daha	9	1.889	0.111	94.12	45	< 0.001	

Table-7:Effect of *Agnikarma* with *Swarna Shalaka* on associated symptoms of 18 patients of *Garbhashaya Grivamukhagata Vrana*.

Sr.No.	Associated Symptoms	N	Mean Score	% of Relief	Wilcoxon	P

			BT	AT		No.	
1	Katishoola	16	2.188	0.3750	82.86	136	< 0.001
2	Udarashoola	3	1.67	0.667	60	6	>0.05
3	Mutradaha	10	1.60	0.200	87.5	55	< 0.001
4	Cervix tenderness	3	0.125	0.25	80	6	>0.05
5	Maithun Paschat Ratkastrava	4	1.2	0.2	83.33	10	< 0.05

Table -8: Effect of Agnikarma with Swarna Shalaka on Per speculum finding of 18 patients of Garbhashaya Grivamukhagata Vrana.

Sr.No. Per speculum finding		N	Mean	Score	% of Relief	Wilcoxon	р
SI.NO.	Per speculum finding	IN	BT	AT	% of Reflet	No.	P
1	% Area of Erosion	16	2.313	0.0625	97.30	136	< 0.001
2	Appearance	16	2.438	0.6250	74.36	136	< 0.001
3	%wise scoring pattern of Cervical erosion	16	2.750	0.6250	77.27	136	< 0.001

#### Result

Swarna SI	h <mark>alaka</mark>	Status
No. of P <mark>atients</mark>	%	Status
11	68.75	Markedly Improved
05	31.25	Moderately Improved
0	00.00	Mildly Improved
0	00.00	Unchanged

## **Discussion**

The characteristic features of Garbhashaya Grivamukhagata Vrana (Cervical erosion) i.e. Discharge and eroded appearance of cervix can be compared to the lakshanas of Vrana and Yonivyapad. Amongst all types of Vrana, Garbhashaya Grivamukhagata Vrana can be taken as Kapha-Pittaja Vrana. Cervical erosion can be taken as Twak Mamsagata Vrana having its manifestation (Adhishthana) in Yoni and chief symptom as Srava. It also exhibits characteristics similar to that shown in various gynecological disorders like Pittaja, Kaphaja, Sannipataja Yonivyapad etc. Cardinal Symptom of this disease is white discharge. It is often diagnosed during P/S examination for deciding the cause of white discharge. Samanya & Vishesh Nidanas of Vrana and Yoni Vyapad can be taken as Samanya & Vishesh Nidana of Garbhashaya Grivamukhagata Vrana,

## **Effect of therapy:**

**Swarna Shalaka** had shown statistically highly significant (P<0.001) result on chief complaint, Associated symptoms like *Katishoola, MPR* and local pathology like % area of erosion, appearance, %wise scoring pattern of Cervical erosion. 3 patients were found to have CIN 1 stage changes on Pap smear findings before treatment, but after the *Agnikarma* 100% relief was observed.

**Overall effect** of the therapy on 16 patients of *Garbhashaya Grivamukhagata Vrana* shows 68.75 % patients were Markedly Improved, 13.25% of patients were moderately improved. During **follow up** study no patient had complaint of recurrence of symptoms within 1 month. But after4- 6 months of follow up 4 patients in had complained of recurrence of cervical erosion due to infected partner or other cause also. No any adverse effects were reported.

## Probable mode of action of Agnikarma by Swarna Shalaka:

Swarna Shalaka due to its Vranaghna, Lekhana, Tridoshahara, Varnya, Garahara, Krimihara, Rasayana and Vishnashana properties has been found very effective in curing excessive vaginal discharge, foul smell, itching, redness, inflammation and in reducing infections. It also has anti inflammatory, antibacterial, healing property. Swarna shalaka have additional anti cancerous and rapid healing property which repairs the damaged epithelium by rejuvenative action.

## **Conclusion:**

- From the present study it is concluded that *Garbhashaya Grivamukhagata Vrana* quite frequent in women, manifested with vaginal discharge associated with itching, backache and *Maithuna pashchat Raktasrava*.
- Agnikarma with Swarna Shalaka had shown statistically highly significant result (P<0.001) in reducing all the clinical features of Garbhashaya Grivamukhagata Vrana.

