



RESEARCH ARTICLE

A CLINICAL STUDY OF KUSTHADI VARTI IN KARNINI YONIVYAPADA W.S.R. TO CERVICAL EROSION

*¹Dr. Aditi Gautam, ²Dr. Sandeep Rajan and ³Dr. Eena Sharma

¹Lecturer, Harmony Ayurvedic Medical College, Ferozpur, Punjab, India

²Lecturer Sri Sai PG Ayurvedic Medical College, Alligarh, Uttar Pradesh, India

³H.O.D., R.G.G.P.G.Ayu. College & Hospital Paprola (H.P.), India

ARTICLE INFO

Article History:

Received 22nd September, 2017

Received in revised form

14th October, 2017

Accepted 03rd November, 2017

Published online 27th December, 2017

Key words:

Cervical Erosion, Karnini Yonivyapada, Kusthadvarti.

ABSTRACT

Women play a great role in upbringing of healthy society. Soherre productive heal this of great concern. Cervical Erosion is one of the most common gynaecological condition seen. The prevalence reported for the Cervical Erosion ranges from 17-50%. There is no direct reference regarding the Cervical Erosion in Ayurvedic classics, but on the basis of pathology and the main symptoms of Cervical Erosion, it resembles with Karnini Yonivyapada. This common ailment may present with symptoms like discharge pervaginum, itching vulva, post coital bleeding, backache. If not treated properly it may lead to worst manifestations like infertility etc. To minimize these, a herbal preparation ie. Kusthadi Varti was selected. In this present dissertation 16 patients were studied. There was moderate improvement in the signs and symptoms of Cervical Erosion.

Copyright © 2017, Dr. Aditi Gautam et al. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Citation: Dr. Aditi Gautam, Dr. Sandeep Rajan and Dr. Eena Sharma, 2017. "A clinical study of kusthadi varti in kamini yonivyapada W.S.R. to cervical erosion", *International Journal of Current Research*, 9, (12), 62140-62143.

INTRODUCTION

Cervical Erosion is one of the most common gynaecological condition seen. It is likely that most women, if not all, will have Cervical Erosion at some point during their lifetimes. The prevalence reported for the Erosion ranges from 17-50%. It is the condition in which the columnar epithelium (which usually covers the endocervix) extends beyond the external cervical orifice. The squamous epithelium typically found in ectocervix is replaced. This common ailment may present with symptoms like discharge pervaginum, itching vulva, post coital bleeding, backache. If not treated properly it may lead to worst manifestations like Infertility etc. In the Ayurvedic literature it becomes evident that most of the gynecological disorders are included in Yonivyapada. There is no direct reference regarding the Cervical Erosion in Ayurvedic classics, but it resembles with Karnini Yonivyapada, on the basis of pathology and the main symptoms of Cervical Erosion. The treatments available according to modern sciences is Cauterization and Cryosurgery, which have their own side effects like Secondary Infertility, Bleeding per Vaginum, Infection etc., and may also destroy the healthy tissues. To minimize these complications a herbal preparation ie. Kusthadi Varti was selected. In this present dissertation 16

patients were studied. The patients for this study were selected from the Prasuti Tantra Avum Stree- Roga OPD of R. G. G. P. G. Ayu. College and Hospital, Paprola, Kangra (H.P.)

Aims and Objectives

- To review the Ayurvedic and Modern literature related to Karnini Yonivyapada w.s.r. to Cervical Erosion.
- To study the efficacy of Kusthadi Varti in the management of Cervical Erosion (Karnini Yonivyapad) and to assess the reduction in the signs and symptoms of the assessment criteria.
- To study any side effect related to the drug.

MATERIALS AND METHODS

The present study was conducted in the department of Prasuti tantra & stree roga OPD/IPD of hospital affiliated to R.G.G.P.G.Ayurvedic College & Hospital, Paprola, Distt. Kangra (HP) during 2015.16 patients fulfilling the inclusion criteria were randomly selected into the test group. The detailed history, complaint and associated symptoms were interogated and recorded. The collected data was analysed statistically.

Inclusion criteria

- Married female patients of age group between 20- 45 years.

*Corresponding author: Dr. Aditi Gautam,

Lecturer, Harmony Ayurvedic Medical College, Ferozpur, Punjab, India.

- Clinically diagnosed and confirmed patients of Cervical Erosion.
- Patient willing to go through trial.

Exclusion criteria

1. Women of age less than 20yrs and above the of 45 years.
2. Pregnant woman
3. Menopausal woman
4. Patient having organic pathology of uterus.
5. Any benign or malignant lesion of Cervix.
6. Patient having 2nd and 3rd degree Uterine Prolapse.
7. HIV, VDRL positive patient.

Laboratory investigations

For the purpose of assessing the general condition of patients and exclusion of other pathogenesis the following investigations were performed in patients:-

a. Blood

- Complete Haemogram (Hb gm%, TLC, DLC, ESR)
- Fasting Blood Sugar.
- HIV
- VDRL

b. Urine - Routine & Microscopic

c. Pap smear

d. Wet smear

Drug: Kusthadi Varti-Kustha, Pippali, Arka, Saindhava lavana.

Follow ups

- One follow up after 7 days during treatment.
- Second after 15 days of drug free period.

Assesment criteria

Assessment of patients on subjective criteria-Discharge P/V (Yonitaha Srava), Backache / Katisula, Itching Vulvae, pain in lower abdomen, objective criteria- Site, Size, Appearance, Bleeding on touch "Wet smear" method-Among them incidence of % epithelial Cells, pus cells as well as infection causing organisms like yeast, fungi mainly monilia was noticed.

Overall effect of therapy

- No change: Less than 25% change in the signs & symptoms.
- Mild improvement: 26 to 50% relief in the signs and symptoms.
- Moderate improvement: 51 to 75% relief in the signs and symptoms.
- Marked improvement: 76% to 100% relief in the signs and symptoms.
- Cured: 100% relief in the signs and symptoms.

Statistical analysis of data

The data obtained in clinical study before and after treatment was expressed in term of mean, standard deviation (\pm SD) and

standard Error (\pm SE). Appropriate test like t- test was applied to observe the significance between before and after treatment and regarding inter group comparison of drug effects.

The obtained results were interpreted as:

- Insignificant result p value between 0.5-0.1
- Significant p value between 0.05-0.01
- Highly significant p value between 0.005-0.001

Observations

Total 20 patients were registered for the clinical study.

- Maximum number of patients were in age group of 26-30 years which is the sexually active phase and had the coital frequency 3-4 times per week. This resulted in increased probability of infections. 40% of patients had tube ligation followed by patients not using any contraceptive method.
- All the patients were Hindu and from the rural area because of the Hindu dominance in this area and rural location in which the study was conducted. 70% patients were housewives with agricultural background.
- 40% of patients were educated up to high school level and belonged to lower middle class.
- Maximum no. of Patients i.e. 50% were having *vata-kaphaj prakriti* followed by *kapha-pittaj* in 30% Patients. The vitiation of vata-kaphadoshas leads to the Karnini Yonivyapada. Thus more prevalent in the patients having vata-kaphaj prakriti.
- **Menstrual cycle:** Maximum no. of Patients i.e. 75% were having regular menstruation and the amount of bleeding was moderate. 80% patients had the complaint of dysmenorrhea. In 60% patients the interval between two cycles was 28-30 days. In 65% patients the duration of menstruation was 3-5 days. This shows that there is no direct relationship between menstrual disturbances and Cervical Erosion.
- **Obstetrical History:** The highest incidence of Cervical Erosion was found in the multigravida patients i.e. 85%. It is well known fact that due to repeated deliveries and abortions general health of the patient get reduced. So greater incidence in multigravida women was due to reduced resistance because of repeated strain of pregnancy, anaemia, fatigue and chronic infections.
- **Incidence according to chief complaint:** Chief complaint of the patients was *Vaginal Discharge* which was found in 100% patients. *Itching vulvae* was present in 45% patients. *Pain in lower abdomen* was present in 80% patients. *Low backache* was present only in 50% patients.
- **P/S examination of cervical erosion:** Maximum number of patients i.e. 60% had normal size of cervix. In maximum no. of patients i.e. 80% the discharge was mucoid, followed by 20% patients who had mucopurulent discharge. In 55% patients the area of Cervical Erosion was 76-100% followed by 25% patients in which the area covered by the Erosion was between 26-50%. Erosions were of bright red colour in 70% patients. In 65% patients there was no bleed on touch followed by 30% patients in whom oozing was present and in 20% patients frank bleeding was present.
- **P/V examination:** During bimanual examination, 60%

patients had firm consistency of cervix. Maximum number of patients i.e. 70% were having anteverted and freely mobile uterus. 30% of patients were having retroverted and freely mobile uterus. The size of uterus was normal in 75% patients and bulky in 25% patients.

Discussion regarding effect of the drug on various parameters

- Most of ingredients present in the kusthadi Varti have the Anti-inflammatory property which resulted in decreased congestion and decreased secretion from the

Incidence of Symptoms associated with cervical Erosion

S.No.	Symptom	Percentage
1.	Vaginal discharge	100%
2.	Pruritus	45%
3.	Pain abdomen	80%
4.	Lowbackache	50%

Effect of therapy

Symptoms	Mean score		Mean difference	% age	SD ±	SE ±	't'	P
	BT	AT						
Vaginal discharge	2.43	1.18	1.25	51.4%	0.577	0.144	8.660	<0.001
Pruritus vulva	0.875	0.125	0.750	85.7%	0.931	0.233	3.223	0.006
Pain in lower abdomen	2.188	0.875	1.313	60%	0.704	0.176	7.456	<0.001
Backache	1.125	0.750	0.375	33.3%	0.619	0.155	2.423	0.029

Symptoms	Mean score		Mean difference	% age	SD ±	SE ±	't'	P
	BT	AT						
Extent of erosion	2.688	1.250	1.438	53.4%	0.629	0.157	9.139	<0.001
Oozing of blood	0.563	0.125	0.438	77.7%	0.964	0.241	1.815	0.089
Colour of erosion	2.813	1.125	1.688	60%	0.793	0.198	8.510	<0.001
Wet smear	2.438	1.063	1.375	56.3%	0.619	0.155	8.883	<0.001
Vaginal Ph	6.18	5.26	0.96	12.7%	0.943	0.298	3.354	<0.01

Overall Effect of Therapy

S. No.	Result	No. of patients	% relief
1.	Markedly improved	4	76-100
2.	Moderately improved	10	51-75
3.	Mildly improved	1	26-50
4.	Unchanged	1	<25

DISCUSSION REGARDING DRUG

The drug used in the trial was *Kusthadi Varti* for local vaginal application. *Ayurveda*, the ancient system of medicine mentioned various types of *Chikitsa*. Among them, *Sthanika Chikitsa* is one of them which is used in the trial to evaluate its efficacy.

Probable mode of action of *Sthanika Chikitsa*

- The vagina absorbs water, electrolytes and substances of low molecular Weight.
- The vaginal wall and the tissues around are extremely vascular which facilitates the absorption of drugs through the vagina.
- It maintains the friendly flora in the vagina. Friendly bacteriasuch as acidophilus are normally found in the vagina. When colonies of these organisms are present, it is difficult for unfriendly organisms to become established.

Probable mode of action of *Vartis*

- *Vartis* are meant for *shodhana karma*.
- *Vartis* are hygroscopic thus they absorb the *svavas*.
- *Vartis* show the action according to the drugs it contains.

glands, thus the amount of vaginal discharge decreased. Due to this effect the pain in lower abdomen was also relieved.

- The Antiseptic, Antimicrobial and Antifungal activity of the drug prevented invasion of the microorganisms. Thus the complaint of Pruritus Vulva decreased. Due to these properties there was significant improvement in the wet film study also.
- Local application of kusthadi Varti on the eroded area helped in removal of columnar epithelium from the eroded area because of its Lekhanakarma. As soon as the columnar epithelium was removed the process of re-epithelization took place rapidly. The decrease in vaginal pH was due to the acidic nature of the varti.
- After the treatment of one week there was increase in the vaginal discharge because of the tikshanaguna of the Varti. As the healing process started, the discharge decreased after two weeks.

To sum up the results of the trial drugs, it is evident that

- Kusthadi Varti is effective in the management of Karnini Yonivyapada w.s.r. to Cervical Erosion.
- All the Haematological parameters were within normal limits after treatment and no adverse effect of the drug was found. So the clinical efficacy of Kusthadi Varti is established.

- On the basis of parameters developed to assess overall efficacy of trial formulation, 10 (62.5%) patients showed moderate improvement, 4 (25%) patients showed marked improvement, 1 (6.2%) showed minimum improvement while 1 (6.2%) patients showed no improvement.

Acknowledgement

Author is thankful to Prof Dr. Eena Sharma M.D(Ayu), H.O.D., P.G. Deptt of Prasuti Tantra avum Stree Roga, Dr. Kamini Dhiman M.D., Ph.D.(Ayu.) CCHMReader, P.G. Deptt of Prasuti Tantra avum Stree Roga, Dr. Seema Shukla M.D (Ayu), Sr. Lecturer P.G. Deptt of Prasuti Tantra avum Stree Roga, Dr. SoniKapil M.D., Ph.D.(Ayu.), Lecturer, P.G. Deptt of Prasuti Tantra avum Stree Roga for their guidance and support.

REFERENCES

- Ayurvediya Striroga avum prasutitantra part 1and 2by Dr.Prof.P.V.Tiwari
- Charaka Samhita, Vidyotini hindi commentary Commented By Kashinath Shastri And Gorakhanath Chaturvedi, Published By Chaukhambha Bharti Academy, Varanasi. (Chi.30/7-8, 14, 27-28, 45-46)
- Harrison's principle of internal medicine, Mc Graw Hill Companies Publication, 16th edition.
- Shaw's textbook of gynacology. Elsevier publications; 16th edition.
- Sushruta Samhita Ayurveda Tattva Sandipika Hindi commentary by. Kaviraj Ambikadutta Shastri Chaukhamba Samskrita Samsthana (Sh.5/44, 39) (Sh.3/9) (Sh.2/39) (U-38/3-4,15-17)
- Text book of Gyanaecology D.CDutta.
- To Evaluate the Role of Kampillakadi Ghrita in the Management of Garbhashya Greevagata Vrana (Cervical Erosin) by Dr. Meena Parmar.
