



Research Article

AYURVEDIC MANAGEMENT OF CERVICAL EROSION THROUGH YONI PRAKSHALAN AND JATYAADI TAIL PICHU: A PILOT STUDY

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ABSTRACT

Introduction: Ectropion is defined as erosion, eversion of cervical mucosa and is usually associated with leucorrhoea due to chronic endocervicitis. It is seen as red circular, granular surface surrounding the cervical Os bathed in discharges. Separate description of cervical erosion is not available in Ayurveda classics. On study of etiological factors and sign and symptoms of the disease it is found to be caused by *Kapha Pitta Dosh* *Prakopa* affecting *Yoni* and *Garbahshayamukha* leading to *Samprapti* which further manifests as cervical erosion. Based on the effecting *Doshas* and etiological factors the therapy is selected i.e., *Yoniprakshalan* with *Panchvalkalkwath* and *Jatyaaditail Pichu*. Both are *Kapha Pittashamak* and have curative effects on sign and symptoms of cervical erosion. **Material and Methods:** A total 10 patients were selected from department of *Prasuti Tantra* and *Stree Roga* based on diagnostic, exclusion and inclusion criteria. *Yoniprakshalan* with 250 ml *Panchvalkal Kwatha* and *Pichu* with *Jatyaadi Tail* done for 7 days in three consecutive cycles. **Results:** Highly significant results ($p < 0.0001$) were obtained on amount of discharges, color of erosion and cervical tenderness. Area covered by erosion decreased significantly after treatment. Overall effect of the therapy includes marked improved in 50 % of the patients. **Conclusion:** The therapy proved to be an effective measure in the management of cervical erosion. Clinical trial with large no of population should be done in future to see further effects of the therapy and to establish successful *Ayurvedic* management of this highly prevalent disease of the women in present world.

KEYWORDS: Cervical Erosion, *Yoniprakshalan*, *Panchvalkalkwath*, *Jatyaaditail Pichu*.

INTRODUCTION

Cervical erosion is a common finding on routine pelvic examination during the fertile years. The medical term for cervical erosion is 'cervical ectopy'. The term erosion is misleading, since there is no loss of surface tissue from the cervix.^[1] The lesion consists of a zone of columnar epithelium on the vaginal portion of the cervix in place of the stratified, squamous epithelium normally found below the external Os. Erosion may be congenital and acquired. Congenital erosion persists only for a few days until the level of oestrogen derived from the mother falls and heals spontaneously.

Acquired erosion occurred in pregnancy amongst the pill users and patient with chronic cervicitis. In pill users when the oestrogen level is high, the squamo-columnar junction moves out so that the columnar epithelium extends onto the vaginal portion of the cervix replacing the squamous epithelium.^[2] Pregnant women and women who take hormonal contraceptives show hyperplasia of the endocervical epithelium and papillary erosion on the cervix.^[3]

Whenever the mouth of an endocervical gland opening gets blocked, it gets distended with inspissated secretion resulting in a cystic bulge known as the nabothian follicle. The squamous epithelium occluding the mouths of the glands forms the follicular cystic erosion.^[4]

In chronic cervicitis, pus and mucus are discharged from the cervical canal and bathe the cervix.

The discharge is alkaline and tends to cause maceration of the squamous epithelium so that after a time the cells desquamate and leave a raw red area denuded of epithelium around the external Os. In the process of healing, columnar epithelium from the cervical canal grows over and covers the denuded area so that macroscopically the red area is covered by smooth glistening translucent epithelium. The affected area around the external Os is a simple flat erosion. After a variable interval, the squamous epithelium of the vaginal portion of cervix replaces the columnar epithelium of the erosion, the squamous epithelium growing under columnar epithelium and gradually pushing it away, until finally the squamous epithelium has completely grown over the eroded area. Unless chronic cervicitis has been cured in the meantime, chronic cervicitis leads to recurrent erosions of the cervix and cause simple flat type of erosion.^[5] These regress after the drug is discontinued.

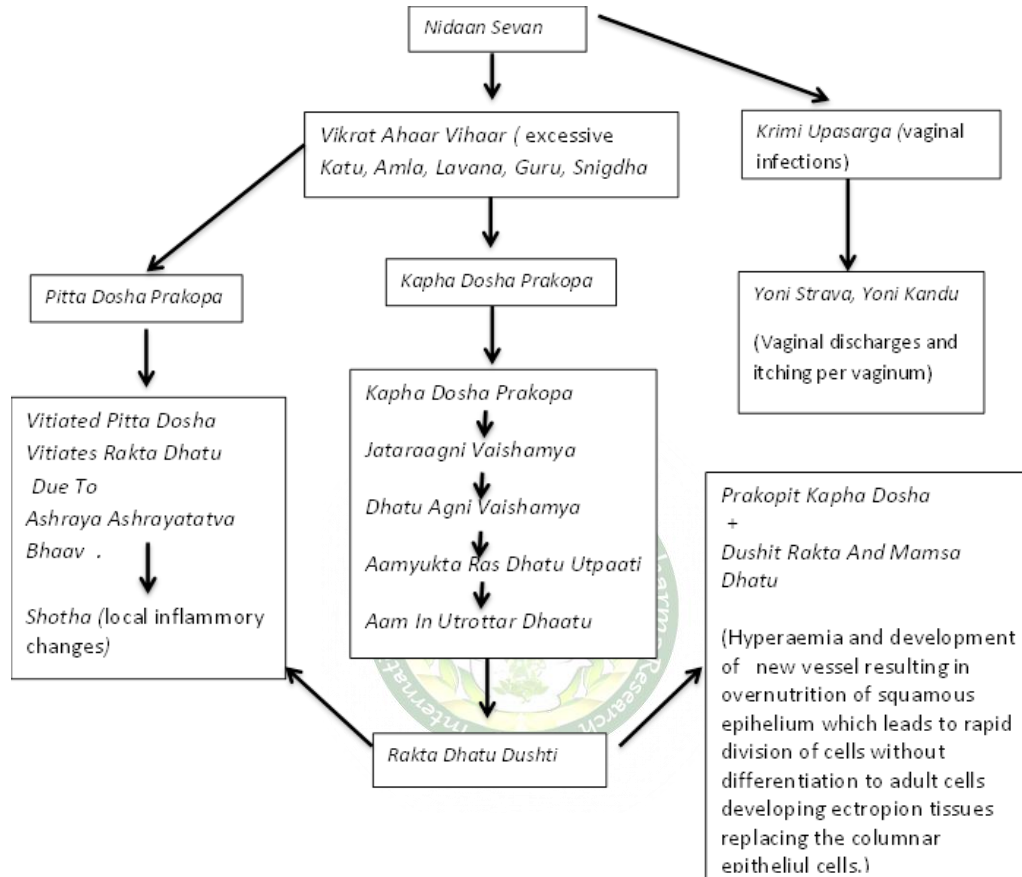
Clinical features: The lesion may be asymptomatic. Vaginal discharge which may be excessively mucoid. It may be mucopurulent, offensive and irritant in presence of infection; may be even blood-stained due to premenstrual congestion. Contact bleeding especially during pregnancy and 'pill use' either following coitus or defecation may be associated. Associated cervicitis may produce backache, pelvic pain and at times, infertility.

Per speculum- there is a bright red area surrounding and extending beyond the external Os in the ectocervix. The outer edge is clearly demarcated. The lesion may be smooth or having small papillary folds. It is neither tender nor bleeds to touch. On rubbing with a gauze piece, there may be multiple oozing spots. The feel is soft and granular giving rise to a grating sensation. When associated with chronic cervicitis, the cervix feels fibrosed, bulky with nabothian follicles around the area of erosion.

The present available treatment of erosion is Diathermy cauterization, Cryosurgery, Laser therapy, Conization operation, etc. These have various complications and most people cannot afford them too. Thus we took a step to develop a cost effective and a simple treatment for the women with cervical erosion through Ayurveda.

Ayurvedic concept in development pathology of cervical ectropion

Flow chart 1:



AIMS AND OBJECTIVES

- To see the efficacy of *Panchvalkal Kwatha Yoni Prakshalan* and *Jatyaadi Tail Pichu* in the management of cervical ectropion.
- To establish a successful *Ayurvedic* treatment for cervical ectropion.

MATERIAL AND METHODS

A total of 10 patients were selected from department of *Prasuti Tantra and Stree Roga Rishikul* campus *Uttarakhand Ayurveda University*. Random selection of the patients was done. Detail proforma of the patients was made and written consent taken explaining merits, demerits, duration of trail and route of administration.

Diagnostic criteria

Patients presenting with history or complaint of vaginal discharges were examined by per speculum examination. Those having visible cervical erosion were registered for the trial. Pap smear examination for cervical cytology was also send.

Inclusion criteria

- Patient willing for trial.
- Married females with age 18-45 years.
- Patient presenting with complaint of vaginal discharges, low backache, dyspareunia, postcoital bleeding.
- Patient having chronic and recurrent vaginitis.

Exclusion criteria

- Patient not willing for trial.
- Unmarried females.
- Age <18 and > 45 years.
- Pregnant women.
- Women taking contraceptive pills.
- Patients with acute PID.
- Patients with any genital growth and eruptions.
- Patient with any systemic disease and infections.
- Patients with malignant changes on Pap Smear examination.

Investigations

- Blood-Hemoglobin, T.L.C, D.L.C, E.S.R, R.B.S, HIV, HBsAg, VDRL.
- Urine - Routine and microscopic examination
- Pap's smear for cervical cytology.

All investigations were done before and after the completion of trial.

Intervention done

Patient was called daily for 7 days in each cycle. She was instructed to pass urine before procedure. Local *Yoni Prakshalan* with 250 ml freshly prepared *Panchavalkal Kwath* was done. After *Prakshalan* a *Pichu* (tampon) dipped in *Jatyaadi Tail* was kept in yoni (vagina) focusing on eroded area with the help ofusco's speculum. The

Pichu was kept as such for 2 hours or till she urge to void urine (*Aamutrakaale*).

Duration of trial: 7 days in each cycle for consecutive three cycles.

Follow up: every 15 days after completion of trial for further three months.

Assessment criteria

All the patients were assessed before and after treatment on the basis of subjective and objective criteria.

Subjective criteria

It was based on the symptoms of cervical erosion and assessed weekly. (Table 1)

Table : 1

1	Amount of Discharges	
	No c/o discharge	0
	Slight discharge (Occasional discharge, Only vulval moistness)	1
	Moderate discharge (Staining of undergarments)	2
	Severe discharge (patient needs pad)	3
2.	Yoni Gandha (malodour)	
	Not any	
	Present	
3.	Yoni Daha (Burning sensation in vagina or vulva)	
	<i>Daha Anupasthit</i> (Absent)	0
	<i>Alpa Daha</i> (mild)(Little, localized & some time feeling of burning Sensation)	1
	<i>Madhyam Daha</i> (Moderate) (More, localized & often burning sensation)	2
	<i>Atidaha</i> (Continuous)	3
4.	Mutra Daha(Burning sensation in vulva after passing urine)	
	Absent	0
	Occasional (Mild bearable <i>Daha</i>)	1
	Moderate (Troublesome <i>Daha</i>)	2
	Severe (<i>Daha</i> not tolerable)	3
5.	Yoni Kandu \ Yoni Vyatha (Itching \ irritation in vulva or vagina)	
	No itching	0
	Occasional (Mild feeling of irritability)	1
	Moderate (Disturbs daily routine)	2
	Constant (Severe, affects routine activity)	3
6.	Katishoola (Low backache)	
	No pain	0
	Occasional (Mild, do not disturb in routine work)	1
	Moderate (Disturbs in daily routine work)	2
	Constant (Severe, routine work avoided due to pain).	3
7.	Dyspareunia	
	Absent	0
	Present	1
8.	Contact bleeding	
	Absent	0
	Present	1

Objective Criteria

Assessment of effect therapy on cervical changes was done before and after trial. (Table 2) It was done on the basis of effect of therapy on the area covered by erosion, color of the erosion, type of discharges and cervical tenderness during examination.

1. Area covered by erosion

Division of the parts of cervix is done as follows:

Upper lip- 50 %

Lower lip- 50 %

Right lateral lip- 25 %

Left lateral lip- 25 %

Graded as:

0-25% -0

25%-50 % -1

50 %-75 % -2

75 %-100 % -3

2. Color of the erosion:

Normal color of erosion-0

Pinkish red-1

Red -2

Deep red-3

3. Type of discharges:

Mild white discharges without foul smell: 0

Moderate discharges without smell-1

Moderate mucoid pale yellow discharges with foul smell-2

Severe discharges embedding the external os or cervix-3

4. Cervical tenderness:

No tenderness: 0

Mild-1

Moderate-2

Severe (patient resists examination)-3

OBSERAVTIONS AND RESULTS:

Data of 10 patients were analyzed statistically. Out of these 70% patients were in age group of 25-40 years (reproductive age group), 60% were grand multipara, 70 % have given birth by normal vaginal delivery, 60% did

not have any contraceptive history. On observing the history given by patients it was found that 80% patients were having the history of vaginal discharges and 50 % were having history of increased sexual activity (5-6 times per week) before developing any symptom of cervical erosion. 70% patients were having associated vulvovaginitis and dyspareunia at the time of registration. Observation of personal history reveals that 40% patients were vegetarian with good appetite, 80% were having hard stool and constipation.

None of the patients registered was found to be alcoholic. The pap smear of 80 % patients revealed acute inflammatory changes. Observations were also done on the basis of *Ayurvedic* parameters. Maximum patients (80%) were found having *Amla Lavan* and *Katu Ras Pradhan Ahaar*. The *Prakriti* of 70 % patients was *Pita kaphaj* and of 20% was *Vat-Pittaj*, 30% patients were having *Madhyama Saar* and 30 % having *Avar Saar*. *Satva* of 60% patients was *Avar* and 40 % was *Madhyama*.

Significant changes was observed on the chief complaints of cervical ectropion. 50 % relief was found in amount of discharges and 80 % relief was found in the complaint of foul smell within 7 days of first cycle of trial. Effect of trial on dyspareunia was found to be 80% after completion. Effects of study of trial were assessed by application of paired t test on subjective and objective parameters. (Table 2, Table 3, Table 4, Table 5.)

Table 2. Effect Of Treatment On Subjective Parameters

	Mean	% relief	S.D.	S.E.	't'	P	S
Amount of Discharges	1.4	75%	0.5164	0.1633	8.573	<0.0001	HS
Yoni Daha	0.4	40 %	0.6922	0.2211	1.809	0.1039	NS
Yoni Gandha	0.7	100 %	0.483	0.1528	4.583	0.0013	S
Mutra Daha	0.3	27%	0.483	0.1528	1.964	0.0811	NS
Katishoola	0.7	46 %	0.483	0.1528	4.583	0.0013	S
Dyspareunia	0.6	27 %	0.5164	0.1633	3.674	0.0051	S
Low Backache	0.6	75 %	0.5164	0.1633	3.674.	0.0051	S
Contact Bleeding	0.2	6 %	0.4216	0.1333	1.5	0.1679	NS

Figure 1. effect of treatment on subjective parameters

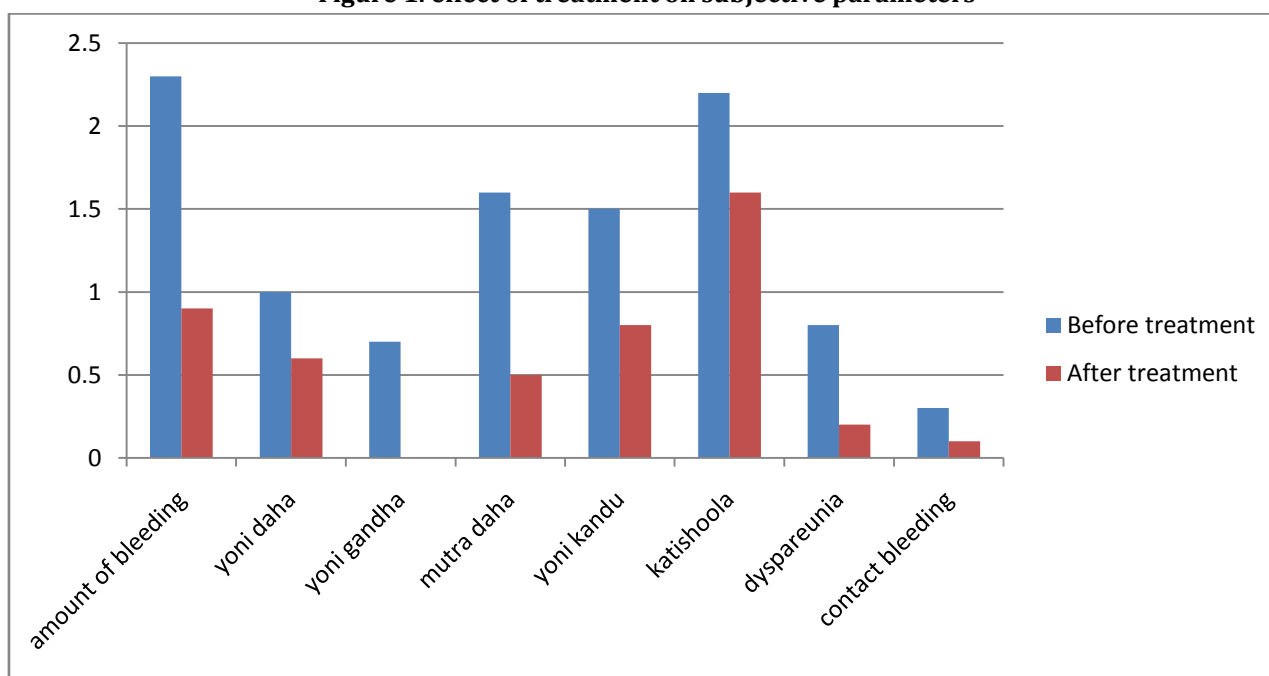


Figure 2. Effect Of Treatment On Objective Parameters

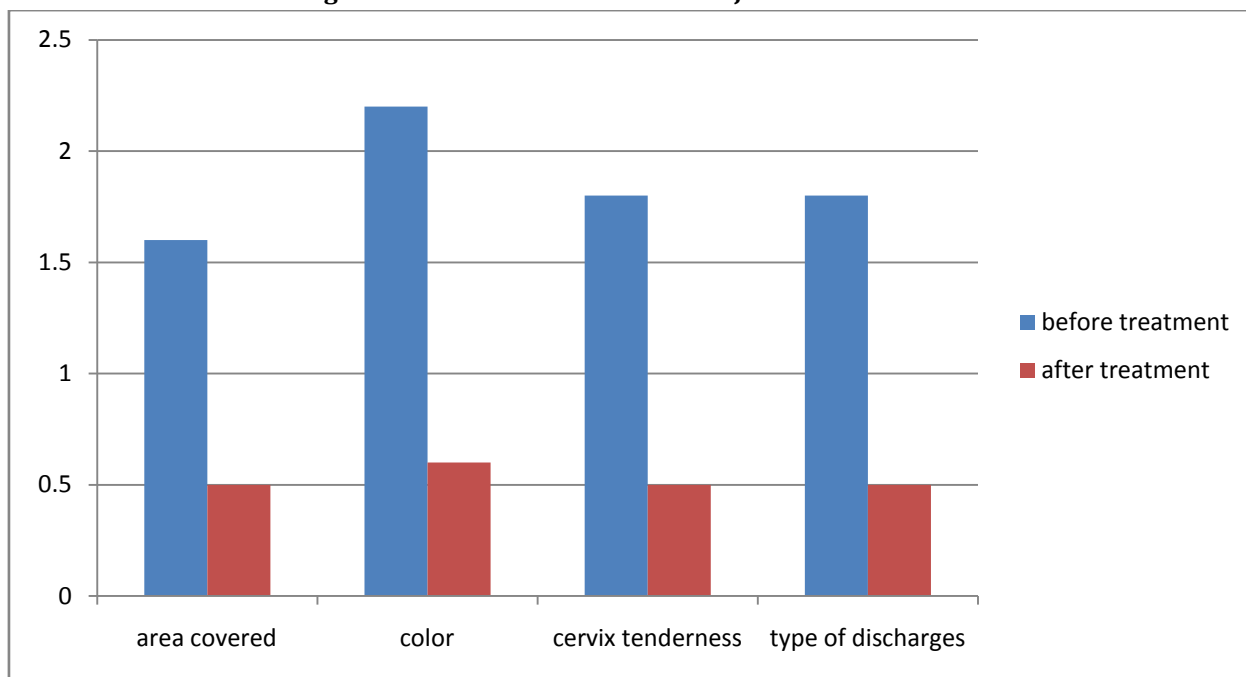


Table 3. Effect Of Treatment On Objective Parameters

	mean	% relief	S.D.	S.E.	't'	P	S
Area Covered	1.1	68 %	0.5676	0.1795	6.128	0.0002	S
Color	1.6	72%	0.5164	0.1633	9.798	<0.0001	HS
Cervical Tenderness	1.3	72 %	0.4583	0.1382	9.409	<0.0001	HS
Type Of Discharges	1.3	72 %	0.6403	0.1931	6.734.	<0.0001	HS

Table 4. Effect of Treatment on Cervical Cytology Expressed as No of Patients Before Treatment And After Treatment

Cervical cytology report	Before treatment	After treatment	% change
Squamous epitheliul cells	2 (20 %)	7 (70 %)	50 %
Inflammatory cells	8 (80%)	3 (30 %)	50 %

Figure 3. Effect Of Treatment On Cervical Cytology Expressed as No of Patients Before Treatment and After Treatment

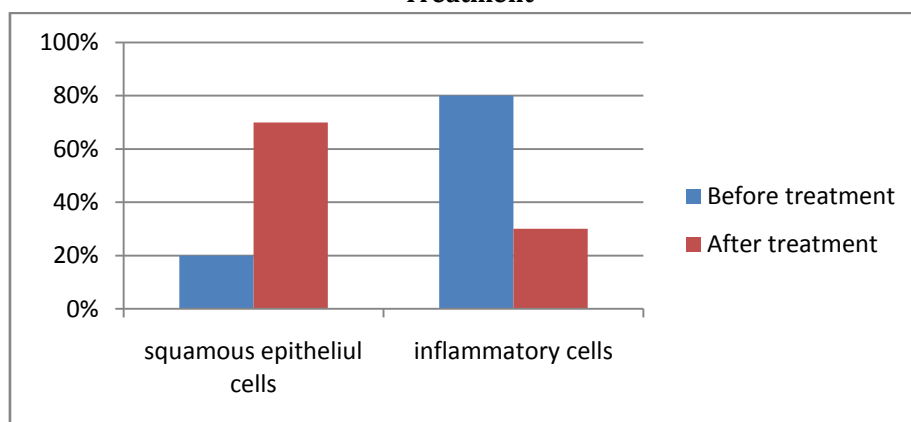


Table 5. Overall effect of therapy expressed as no of patients

Improvement	No of patients
Completely cured	2(20 %)
Markedly improved	5(50 %)
Mild improvement	2 (20 %)
No effect	1 (10%)

Figure 4: Overall effect of therapy expressed as no of patients

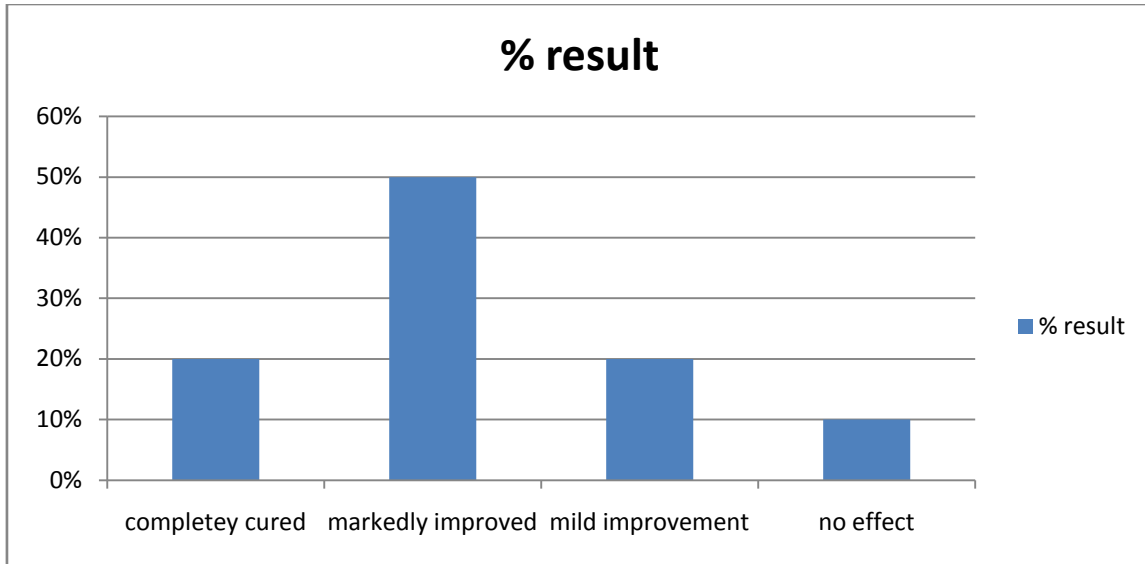


Fig 5. (A) Before treatment



Fig 5. (B) After treatment



Fig 6. (A) Before treatment



Fig 6. (B) After treatment



Fig 7. (A) Before treatment



Fig 7. (B) After treatment



Fig 8. (A) Before treatment



Fig 8. (B) After treatment



Fig 9. (A) Before treatment



Fig 9. (B) After treatment

DISCUSSIONS

The probable mode of action of the therapy is based on removing the root cause of cervical erosion. It is well known that chronic and recurrent infection aids in the development of cervical erosion as explained earlier in the pathogenesis above. *Panchavalkal Kwath* and *Jatyaadi Tel* both possess *Shothhar* (anti-inflammatory) and *Krimighana* (anti-microbial) properties apart from *Rakta Shodhak*, *Varnahar*, *Kapha Pitta Doshanashak Gunas*.

Panchavalkal Kwatha

The contents of *Panchavalkal* are *Kaphapittanshak*, *Dahanashak*, *Stambhan*, *Yonidoshahar*, *Yonishodhak*, *Shothhar*, *Rakpittanashak*.^[6] It decreased amount of vaginal discharge, foul smell and itching per vaginum by its *Stambhan*, *Kapha Doshhar*, *Yonidoshahar Gunas*. The effect on local inflammatory symptoms may have occurred due to *Shothhar*, and *Pitta Doshahar* properties. It may have reduced hyperaemia of cervix by its *Rakta Pittanshak Guna* and prevents rapid growth of squamous epithelium by its *Kapha Dosh Nashak Guna*. By its antimicrobial and anti-inflammatory effect it worked on chronic cervicitis. Thus *Panchavalkal Kashaya Dhawan* reduces pain, discharge, redness, swelling of the cervix.

Jatyaadi Tel

Haridra, *Daruharidra*, *Nimba Patra*, and *Jati Patra* present in it have antibacterial, antifungal and anti-inflammatory effects. *Kaasis* (copper sulphate) is highly toxic to microbes even at low concentrations. *Haridra* also showed analgesic properties thus working on pain induced

by inflammation. Highly significant effects were obtained on cervical tenderness (75 % relief) and they can be understood by anti-inflammatory and analgesic effect of the contents of the drugs used in the therapy. Researches showed that *Manjishtha* when applied externally increases peripheral circulation and detoxifies blood thus it have worked in reducing hyperaemia of the local cervical tissue.^[7] *Lodhra* reduced amount of discharges by its *Grahiguna* and astringent properties.

CONCLUSION

The present study showed the effect of *Panchavalkal Kwath Yoni Prakshalan* and *Jatyadi Tel Pichu* on cervical erosion. 50% of the patients were markedly improved. Changes were also obtained in inflammatory cervical smear. In some cases complete healing of the erosion was not observed but there was significant relief in subjective symptoms and signs so it can be stated that in these cases the erosion may be deep seated which may heal in prolonged period if the treatment would be continued as the therapy is successful in changing the environment of vagina giving relief in subjective signs. The therapy proved to be an effective measure in the management of cervical erosion. Clinical trial with large no of population should be done in future to see further effects of the therapy and to establish successful Ayurvedic management of this highly prevalent disease of the women in present world.

REFERENCES

1. Goodall J.R., The Pathology Of Cervical Ectropion (Cervical Erosion), canadian medical association journal, 22 (2), 178-180.
2. Dutta, D.C, Text Book Of Gyanaecology. 5th Edition: Revised Reprint: 2009; Kolkata; New Central Book, 2014. Agency (P) Ltd, 2008.
3. Howkins And Bourne, Shaws's Textbook Of Gynecology, 16th Edition: 2014, Elsevier Publications, 2014. pg 171-173.
4. Howkins And Bourne, Shaws's Textbook Of Gynecology, 16th Edition: 2014, Elsevier Publications, 2014. pg 171-173.
5. Howkins And Bourne, Shaws's Textbook Of Gynecology, 16th Edition: 2014, Elsevier Publications, 2014. Pg 171-173.
6. Vd. V. M. Gogte, Properties of Panchvalkal Dravya as a wound healing (Vranropak), Anti-inflammatory (Vranshothahar), Analgesic (Vednahar), Ayurvedic Pharmacology & Therapeutic Uses of Medicinal Plants (Dravyagunvignyan), page no.318-536-659-661-715, Chowkamba Publication, New Delhi. 2009.
7. Biswas Tk Mukharjee b, Plant Medicines Of Indian origin For wound Healing Activity: a Review. Int J Low Extreme Wounds, 2003.

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