

**COMPARITIVE CLINICAL STUDY TO EVALUATE EFFICACY OF
PALASHA KSHARA AND DHATAKYADI TAILA PICHU IN THE
MANAGEMENT OF CERVICAL EROSION (*KARNINI YONIVYAPAD*)**

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ABSTRACT

‘Cervical Erosion’ may not be fatal, yet the long term association with the disease and a number of symptoms both related to the genitourinary system as well as psychological imbalance in the patients affecting their daily routine. It is a benign condition but if left untreated may leads up to infertility and predisposes cervical malignancy. That’s why it is important to pay attention towards this troublesome disease. It is a condition in which the squamous covering of the vaginal aspect of the cervix is replaced by columnar epithelium which is continuous with that lining the endocervix. Considering the features, it can be correlated with *Karnini Yonivyapad*. The treatment

is designed to destruct overgrown columnar epithelium and facilitates the growth of new healthy stratified squamous epithelium. In Ayurvedic classics for destruction of any such lesion *Kshara* is described. After the destruction of the columnar epithelium the normal squamous epithelium from the basal cell grows and heals the erosion. To enhance this process of epithelization *Ropaka yoga* is used which helps in the healing and regeneration of the tissue. Keeping these points in view, the present work a clinical comparative study has been made to evaluate the efficacy of *Palasha Kshara* and *Dhatakyadi Taila Pichu* in cervical erosion. Results were assessed on the basis of re-epithelization of erosion and

improvement in symptoms. The study reveals that *Palasha kshara* and *Dhatakyadi Taila Pichu* (GroupA) is highly effective (71.40%) in disintegration of the pathogenesis of the disease as compare to *Dhatakyadi Tail Pichu* (GroupB).

KEYWORDS: Cervical Erosion, Karnini Yonivyapad, Palasha Kshara, Dhatakyadi Taila.

INTRODUCTION

Cervical erosion is a condition in which the squamous covering of the vaginal aspect of the cervix is replaced by columnar epithelium which is continuous with that lining the endocervix. It is not an area denuded of epithelium as the name implies. Small areas of ulceration sometimes seen microscopically are the result of secondary infection and local trauma, or are artefacts. Erosion has a bright red appearance with a clearly defined edge, the colour being explained by the underline vascular tissue showing through a thin epithelium.^[1]

Erosion is not a static condition and the line of demarcation between the two types of epithelium moves to and from the external os. The junctional zone is referred to as the 'transformation zone' of the squamocolumnar junction. When it is advancing towards the os the erosion is to be 'healing'. In this process the proliferative squamous epithelium can obstruct the ducts and produce nabothian cysts.^[1]

It is a benign condition and as such is not an ulcer; it will never ulcerate unless it turns into malignancy.

The prevalence of cervical erosion in women of reproductive age is variable and has been quoted as being between 14 to 37 percent in women attending outpatient clinics.^[2] Goldacre et al^[3] studied 1498 women attending a family planning clinic to determine the clinical and social characteristics associated with cervical erosion. They discovered that the prevalence was increased with parity and use of the combined oral contraceptive pills. The prevalence of erosion was reduced in women aged over 35 years. The presence of erosion is influenced by oestrogens; hence it is often found in women after the menarche, during pregnancy or with use of the combined oral contraceptive pill.^[3,4] Erosion is rare in postmenopausal women, as a result of declining oestrogen levels, the cervix shrinks and inverts, drawing the squamous epithelium covering the ectocervix into the endocervical canal.^[4,5]

Cardinal symptom^[6] of cervical erosion is troublesome vaginal discharge; this is believed to be enhanced by the mucus-secreting glandular epithelium, which has now become exposed

within the vagina.^[4,5] It varies in character from mucoid to mucopurulent when associated with some infection because the columnar epithelium having less power of resistance to infection. The other symptoms are contact bleeding, dyspareunia, pruritus vulvae, low backache, lower abdominal pain, burning micturation, sickness feeling etc.

No direct reference regarding *Karnini yonivyapad* is present in the text which makes its resemblance with Cervical Erosion. However, considering the pathology and main symptoms of cervical erosion discharge per vaginum, reddened eroded area and nabothian cyst (*garbhashaya dwar mukha karnika*) and the treatment mentioned in the Ayurvedic texts, it can be correlated with the *karnini yonivyapad*.^[9] On the basis of the etiology we can conclude that *karnini* is chiefly the disease of reproductive age group (Cha. Chi. 30/27, 28)^[9], and is commonly seen in sexually active females. *Nidana sevā* vitiates the *Vata (apana vayu)*, *Kha-vaigunya* is present in the *artavavaha strotas*. So here the vitiated *vata* get mixed with *kapha dosha* and *rakta dhatu* and in this way *Dosha-dushya-sammurchana* is completed. *Adhithana* of disease is the *garbhashaya dwar mukha* that is cervix (Astanga Samgraha Uttartantra38/59 Indu Tika).^[12] So in the stage of *vyakta avastha*, *Karnika* is formed here which is the cardinal symptom of *Karnini Yonivyapad*.

Comparing the treatment with modern system of medicine where cauterization^[6] is used, the main purpose of treatment is destructing the columnar epithelium and facilitates the growth of new healthy stratified squamous epithelium. As per Ayurveda *shodhana*, *ropana* and *kaphanashaka chikitsa* is mentioned by the Acharyas which cures the disease by *samprapty vighatana* as vitiation of *vata kapha dosha* are responsible for this disease in other words it destructs the columnar epithelium and facilitate the growth of new healthy stratified squamous epithelium. In Ayurvedic classics for destruction of any such lesion *Kshara*^[11] is described. After the destruction of the columnar epithelium the normal squamous epithelium from the basal cell grows and heals the erosion. To enhance this process of epithelization *Ropaka Yoga* is used which helps in the healing and regeneration of the tissue. With this background, comparative clinical trial of two drugs name *Palasha Kshara* (S.S.Su.-11/12) and *Dhatakyadi Taila Pichu* (Ch.Chi. 30/78-81) were chosen to assess their clinical efficacy on various scientific parameters selected for the disease.

NEED OF THE STUDY

‘Cervical Erosion’ may not be fatal, yet the long term association with the disease and a number of symptoms both related to the genitourinary system as well as psychological

imbalance in the patients affecting their daily routine. Bang *et al* in their study^[7] reported cervical erosion to be 45.70% presently 80-85% of women have been computed with cervical erosion. It is a benign condition but if left untreated may leads up to infertility and predisposes cervical malignancy.^[2] That's why it is important to pay attention towards this troublesome disease and to detect these lesions early enough and treat them adequately if cancer of the cervix is to be warded off.^[8]

AIMS AND OBJECTIVE

1. To evaluate the efficacy of *Palasha Kshara* and *Dhatakyadi Taila Pichu* in the management of Cervical Erosion (*Karnini Yonovyapad*).
2. To compare clinically the effect of *Palasha Kshara* and *Dhatakyadi Taila Pichu* in the management of Cervical Erosion.

MATERIAL AND METHODS

Study design: Randomized control trial on a single centre.

Trial methodology: Open Trial.

Selection of cases: Total 30 clinically diagnosed and confirmed patients by per speculum examination and having sign & symptoms of cervical erosion were registered from the O.P.D. / I.P.D. of N.I.A. Hospital Jaipur, Rajasthan.

Inclusion criteria: Clinically diagnosed and confirmed patients of cervical erosion who were married and having the age in between 18-45 years, were registered for the present clinical trial.

Exclusion criteria: Women of age less than 18 and above the age of 45 years, pregnant women, Women in Bleeding phase, Patient having coagulation disorders, systemic disease, displacement of uterus, organic pathology, HIV, VDRL, HBsAg positive patients, Patient using I.U.C.D.

Withdrawal criteria: The patient may be withdrawn from the trial if she develops any serious adverse effect. Patient who discontinued the treatment themselves due to any reason or did not returned for the final follow up.

Method of Study: The Present Study was comparative clinical study between two drugs '*Palasha Kshara & Dhatakyadi Taila*' was done in outdoor patients of dept. This study was carried out in 30 patients. The selected Patients were randomly divided into two groups.

Group A: 15 patients were treated by *Palasha Kshara* and *Dhatakyadi Tail Pichu*.

Group B: 15 patients were treated by *Dhatakyadi Taila Pichu*.

Duration of Trial

Group A: *Palasha Kshara* was applied for 7 sitting on alternate day and '*Dhatakyadi Taila Pichu*' for 14 days daily two times in a day after the bleeding phase of menstrual cycle for maximum two consecutive menstrual cycles.

Group B: *Dhatakyadi Taila Pichu* was applied for 14 days daily two times in a day after the bleeding phase of menstrual cycle for maximum two consecutive menstrual cycles. The treatment was started 2nd or 3rd day after bleeding phase of menstrual cycle is over. Abstinence from sex was advised during the period of treatment.

Follow up: Cases were followed daily during application of the drugs and after every 15 days and then final assessment was done after completion of 2 months.

Clinical Methods: A special Proforma was designed incorporating all the details and examination procedures along with sign and symptoms of the disease based on Ayurvedic and Modern description. All the particulars related to each patient were recorded in their respective Proforma. Written consent will be taken from the patient before trial starts.

Examination

Blood: Hb gm%, TLC, DLC, ESR, HIV, HBsAg, VDRL.

Urine: Routine and microscopic examination.

pH of vagina: It was noted down with the help of pH indicator strips.

Pap's smear: Smear from the cervix was taken with Ayre's spatula by rotating it over the external os of cervix in 360^o in clockwise direction and was sent to the pathologist after the fixation of slide, to rule out any dysplasia or carcinoma. All Investigations were done before and after the completion of trial.

Formulation of the drug: *Palasha Kshara* & *Dhatakyadi Taila* are prepared in the pharmacy of National Institute of Ayurveda (GMP certified) at Jaipur (Rajasthan).

Administration of Drug: Patients were called on 2nd or 3rd day after the Bleeding phase of the menstrual cycle. Vaginal cleaning was done with savlon solution. Cervix was exposed with Cusco's speculum and cervix was cleaned properly. *Palasha Kshara* was moisturized by 2-3 drops of sterile water, then applied over the erosion with gauze and kept in contact on erosion for a minute and same procedure is done in three times till cauterized area become dark violet in colour then cauterized area washed with sterile water. After Application of *kshara a pichu* (tampon) dipped in *Dhatakyadi Taila* was kept deep in the vagina on eroded area. It was kept for about 4 - 6 hours in the vagina.

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

1. Subjective Criteria: It was based on the symptoms of Cervical Erosion and assessed every 15 days.

Table. 1.

1.Vaginal discharge	0 (-)	Normal (no c/o discharge)
	1 (+)	Mild - Occasional (slight wetting of garments on/off)
	2 (++)	Moderate - Wetting of garments
	3 (+++)	Severe - Excessive vaginal discharge
2.Dyspareunia	0 (-)	Absent
	1 (+)	Mild Pain during coitus
	2 (++)	Moderate Pain during forceful coitus
	3 (+++)	Severe pain - Patient tries to avoid marital relationship
3.Pruritis vulvae	0 (-)	Absent
	1 (+)	Mild – Occasional
	2 (++)	Moderate - Disturb daily routine
	3 (+++)	Severe - Intolerable itching (affects routine activity)
4.Low-Backache	0 (-)	Absent
	1 (+)	Mild- no interference with daily routine & relieved by rest
	2 (++)	Moderate- interfere daily routine and relief by taking medicine
	3 (+++)	Severe - affect daily routine, no relief taking medicine
5.Lower abdominal\ pain	0 (-)	Absent
	1 (+)	Mild- no interference with daily routine & relieved by rest
	2 (++)	Moderate- interfere daily routine and relief by taking medicine
	3 (+++)	Severe - affect daily routine, no relief taking medicine
6.Burning Micturation	0 (-)	Absent
	1 (+)	Mild – Occasional
	2 (++)	Moderate - Relief by fresh water wash

	3 (+++)	Severe - Patient wants to avoid micturation
7.Sickness Feeling	0 (-)	Absent
	1 (+)	Mild – Occasional
	2 (++)	Moderate - After doing extra work
	3 (+++)	Severe - Even without doing work

Objective Criteria: Assessment of effect of 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, vaginal discharge, oozing of blood, cervical tenderness, nabotian cyst.

Measurement of Cervical Erosion: It was measured with the help of % scale. Calliper method was not suitable practically as the cervix is deep seated part of the body. According to % scale system each lip - Upper lip 50%, Lower lip 50%, Right lateral lip 25% Left lateral lip 25%. Size was measured, according to spread of diseased area.

Table. 2.

1. Area of Erosion	0 (-)	0 – 25%
	1 (+)	26 – 50%
	2 (++)	51 – 75%
	3 (+++)	More than 75%
2. Vaginal discharge	0 (-)	Normal discharge
	1 (+)	Mild- slight discharge on p/s examination up to vulva
	2 (++)	Moderate discharge on p/s exam up to vulva
	3 (+++)	Severe outpouring discharge during local examination
3.Cervical Tenderness	0 (-)	Absent
	1 (+)	With compression and Rubbing with swabs
	2 (++)	Without compression
	3 (+++)	Severe
4. Oozing of blood on rubbing with a gauze piece	0 (-)	Absent
	1 (+)	Few pin points of oozing on rubbing with gauze (<5drops)
	2 (++)	Several pin points of oozing on rubbing with gauze(5-10 drops)
	3 (+++)	Excessive oozing of blood on touching with gauze (>10 drops)
5. Nabotian cyst	0 (-)	Absent
	1 (+)	One
	2 (++)	More than one(2 or 3)
	3 (+++)	Multiple cyst seen

STATISTICAL ANALYSIS

The effect of the treatment on signs and symptoms were analyzed statistically by Mean, (x), Standard Deviation (+S.D), Standard Error (+SE), Paired Wilcoxon Signed rank test (W), Mann-Whitney test (U) for non-parametric study and Paired t- test (t.value) for parametric studies to find out the significance of the values obtained and various conclusions were drawn accordingly.

The obtained result were interpreted in terms of probability (P) as

$p > 0.05$ -Not Significant,

$p < 0.05$ -Significant,

$p < 0.01$ - Very Significant

$P < 0.001$ - Extremely significant

Overall affect of therapies

Rating scale for the assessment of improvement in the sign & symptoms after therapy.

Table. 3.

No relief	0% relief in the signs and symptoms
Mild relief	25% relief in the signs and symptoms
Moderate Relief	26-50% relief in the signs and symptoms
Significant relief	51-75% relief in the signs and symptoms
Excellent Relief	76-100% relief in the signs and symptoms

OBSERVATION

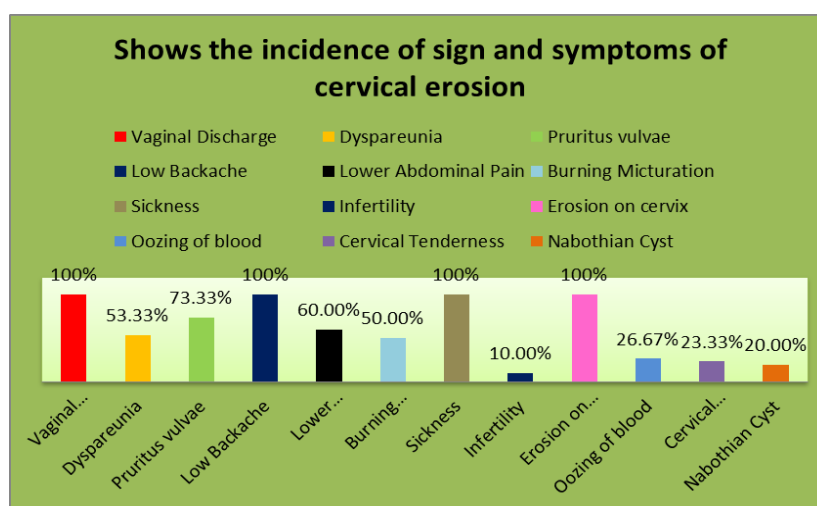
Data of 30 patients were analyzed statistically. Out of these 60% patients were in age group of 26 - 30 yr (Reproductive age group), 43.33% were multipara, 83.33% have given birth by normal vaginal delivery, 46.67% did not have any contraceptive history, 50% have duration of illness between 1-2 yr.

Observation of personal history reveals that 56.67% patients were vegetarian with good appetite, 60% having constipation, 50% having burning micturation and 66.67% having unsatisfied sexual life. None of the patients registered was found to be Alcoholic.

Observation was also done on the basis of Ayurvedic parameters. Maximum 80% were found having *Amla-lavan-katu ras pradhan aahar*. The prakriti of 63.33% patients was Vata-kaphaja and of 26.67% was Pitta- kaphaja, 60% having madhyama sara and 30% having Avar sara, Satva of 53.33% patients was Avar and 33.33% was Madhyama.

Table. 4: Incidence of sign and symptoms of Cervical Erosion.

S. N.	Sign and Symptoms	Group A	Group B	Total	%age
a)	Vaginal Discharge	15	15	30	100%
b)	Dyspareunia	09	07	16	53.33%
c)	Pruritus vulvae	12	10	22	73.33%
d)	Low Backache	15	15	30	100%
e)	Lower abdominal Pain	09	09	18	60%
f)	Burning Micturation	07	08	15	50.00%
g)	Feeling sickness/ fatigue	15	15	30	100%
h)	Erosion on cervix	15	15	30	100%
i)	Cervical Tenderness	04	03	07	23.33%
j)	Oozing of blood on rubbing with gauze piece	04	04	08	26.67%
k)	Nabothian Cyst	03	03	06	20.00%

**RESULT****Table. 5: Clinical recovery in 'Subjective Parameters' of 'Group A'.**

S No	Symptoms	Mean		Dif.	% of Change	SD	SE	W	P	Result
		BT	AT							
1.	Vaginal discharge	2.80	0.33	2.467	88.11%	0.516	0.13	120.00	<0.0001	E.S.
2.	Dyspareunia	0.60	0.13	0.467	77.83%	0.516	0.13	28.000	0.0156	S.
3.	Pruritus Vulvae	1.27	0.33	0.93	73.40%	0.59	0.15	78.000	0.0005	E.S.
4.	Low Backache	1.80	0.867	0.93	51.67%	0.96	0.248	36.000	0.0078	V.S.
5.	Lower Abdominal pain PPPainpain	0.80	0.267	0.53	66.25%	0.83	0.215	15.000	0.0625	N.S.
6.	Burning Micturation	0.60	0.13	0.467	77.83%	0.639	0.165	21.000	0.0313	S.
7.	Sickness Feeling	1.80	0.80	1.00	55.56%	1.00	0.258	36.000	0.0078	V.S.

*W= Wilcoxon matched-pairs signed-ranks test, E.S.= Extremely significant result was found in Vaginal discharge and Pruritus vulvae, V.S.= Very significant result was found in Low backache and Sickness feeling, S.= significant result was found in Dyspareunia and Burning micturation. N.S.= Non significant result was found in Pain in Lower abdomen.

Table. 6: Clinical recovery in 'Objective Parameters' of 'Group A'.

S No	Symptoms	Mean		Dif.	% of Change	SD	SE	W	P	Result
		BT	AT							
1.	Vaginal discharge P/S	2.80	0.40	2.40	85.71%	0.507	0.13	120.00	<0.0001	E.S.
2.	Oozing of blood from ero.	0.40	0.13	0.267	66.75%	0.457	0.118	10.000	0.1250	N.S.
3.	Area of eroded Cervix	2.40	0.667	1.73	72.08%	0.59	0.15	120.00	<0.0001	E.S.
4.	Cervical Tenderness	0.40	0.13	0.267	66.75%	0.457	0.118	10.000	0.1250	N.S.
5.	Nabothian cyst	0.267	0.067	0.20	74.91%	0.56	0.145	3.000	0.5000	N.S.

*W= Wilcoxon matched-pairs signed-ranks test, E.S.= Extremely significant result was found in Vaginal discharge and Area of eroded cervix, N.S.= Not significant result was found in Oozing of blood from Erosion, Cervical tenderness and Nabothian cyst.

Table. 7: Clinical recovery in 'Laboratory Investigation' 'Group A'.

S No	Symptoms	Mean		Dif.	% of Change	SD	SE	T	P	Result
		BT	AT							
1.	Hb gm%	11.32	11.59	0.27	2.33%	0.846	0.22	1.251	0.2315	N.S.
2.	ESR	28.87	25.47	3.40	11.77%	20.85	5.38	0.6315	0.5379	N.S.
3.	Vaginal pH	6.733	5.667	1.067	15.85%	0.70	0.18	5.870	<0.0001	E.S.

t= Paired 't' test, E.S.= Extremely significant result was found in Vaginal pH, N.S.= Not significant result was found in Hb and ESR.

Table. 8: Clinical recovery in 'Subjective Parameters' of 'Group B'.

S No	Symptoms	Mean		Dif.	% of Change	SD	SE	W	P	Result
		BT	AT							
1.	Vaginal discharge	2.60	0.67	1.93	74.23%	0.59	0.15	120.00	<0.0001	E.S.
2.	Dyspareunia	0.53	0.13	0.40	75.47%	0.507	0.13	21.000	0.0313	S.
3.	Pruritus Vulvae	1.00	0.20	0.80	80.00%	0.676	0.17	55.000	0.0020	V.S.
4.	Low Backache	1.80	1.067	0.73	40.56%	0.70	0.18	45.000	0.0039	V.S.
5.	Lower Abdominal pain	0.80	0.40	0.40	50.00%	0.63	0.16	15.000	0.0625	N. S.
6.	Burning Micturation	0.73	0.067	0.67	91.78%	0.72	0.186	36.000	0.0078	V.S.
7.	Sickness Feeling	2.13	1.20	0.93	43.66%	0.88	0.228	45.000	0.0039	V.S.

*W= Wilcoxon matched-pairs signed-ranks test, E.S.= Extremely significant result was found in Vaginal discharge, V.S.= Very significant result was found in Pruritus vulvae, Low backache Burning micturation and Sickness feeling, S.= significant result was found in Dyspareunia.

N.S.= Not significant result was found in Pain in Lower abdomen.

Table. 9: Clinical recovery in 'Objective Parameters' of 'Group B'.

S. No.	Symptoms	Mean		Dif.	% of Change	SD	SE	W	P	Result
		BT	AT							
1	Vaginal discharge	2.60	0.667	1.93	74.23%	0.59	0.15	120.00	<0.0001	E.S.
2	Oozing of blood from erosion	0.53	0.20	0.33	62.26%	0.617	0.159	10.000	0.1250	N.S.
3	Area of eroded cervix	2.467	0.80	1.667	67.57%	0.617	0.159	120.00	<0.0001	E.S.
4	Cervical Tenderness	0.20	0.067	0.13	65.00%	0.35	0.09	3.000	0.5000	N.S.
5	Nabothian cyst	0.20	0.067	0.13	65.00%	0.35	0.09	3.000	0.5000	N.S.

*W= Wilcoxon matched-pairs signed-ranks test, E.S.= Extremely significant result was found in Vaginal discharge and Area of eroded cervix, N.S.= Not significant result was found in Oozing of blood from Erosion, Cervical tenderness and Nabothian cyst.

Table. 10: Clinical recovery in 'Laboratory Investigation' of 'Group B'.

S No	Symptoms	Mean		Dif.	% of Change	SD	SE	T	P	Results
		BT	AT							
1.	Hb gm%	11.49	11.77	0.273	2.32%	1.502	0.388	0.7050	0.4924	N.S.
2.	ESR	31.00	29.33	1.667	5.38%	11.33	2.926	0.5697	0.5779	N.S.
3.	Vaginal P _H	6.667	5.267	1.400	21.00%	0.828	0.21	6.548	<0.0001	E.S.

t = Paired 't' test, E.S.= Extremely significant result was found in Vaginal pH, N.S.= Not significant result was found in Hb and ESR.

Table. 11: Inter Group Comparison in "Subjective Parameters".

S. No.	Symptoms	Mean		SD		SE		U	P	Result
		G _A	G _B	G _A	G _B	G _A	G _B			
1.	Vaginal discharge	2.467	1.93	0.516	0.59	0.13	0.153	63.000	0.0195	S.
2.	Dyspareunia	0.467	0.40	0.516	0.507	0.13	0.13	105.00	0.7353	N.S.
3.	Pruritus Vulvae	0.93	0.80	0.59	0.676	0.15	0.17	99.500	0.5530	N.S.
4.	Low Backache	0.93	0.73	0.96	0.70	0.248	0.18	101.00	0.6255	N.S.
5.	Lower Abdominal pain	0.53	0.40	0.83	0.63	0.215	0.163	107.50	0.8227	N.S.
6.	Burning Micturation	0.467	0.667	0.64	0.72	0.165	0.187	95.500	0.4439	N.S.
7.	Sickness Feeling	1.00	0.93	1.00	0.88	0.258	0.228	108.50	0.8750	N.S.

U= Mann-Whitney Test, S.= significant result was found in Vaginal discharge, N.S.= Not significant result was found in Dyspareunia, Pruritus vulvae, Low backache, Pain in Lower abdomen, Burning micturation and Sickness feeling.

Table. 12: Inter Group Comparison in "Objective Parameters".

S No	Symptoms	Mean		SD		SE		U	P	Result
		G _A	G _B	G _A	G _B	G _A	G _B			
1.	Vaginal discharge P/S	2.40	1.93	0.507	0.59	0.13	0.15	69.000	0.0365	S.
2.	Oozing of blood from ero.	0.267	0.33	0.457	0.617	0.118	0.159	110.50	0.9356	N.S.
3.	Area of eroded cervix	1.73	1.667	0.59	0.617	0.153	0.159	105.50	0.7586	N.S.
4.	Cervical Tenderness	0.267	0.13	0.457	0.35	0.118	0.09	97.500	0.3856	N.S.
5.	Nabothian cyst	0.20	0.13	0.56	0.35	0.14	0.09	111.50	0.9720	N.S.

U= Mann-Whitney Test, S.= significant result was found in Vaginal discharge, N.S.= Not significant result was found in Area of eroded cervix, Oozing of blood from Erosion, Cervical tenderness and Nabothian cyst.

Table. 13: Inter Group Comparison in “Laboratory Investigation”.

S No	Symptoms	Mean		SD		SE		T	P	Result
		G _A	G _B	G _A	G _B	G _A	G _B			
1.	Hb gm %	0.27	0.27	0.846	1.50	0.22	0.39	1.218E-19	>0.9999	N.S.
2.	ESR	3.267	1.667	20.7	11.3	5.356	2.926	0.2622	0.7958	N.S.
3.	Vaginal P _H	1.067	1.400	0.70	0.82	0.18	0.21	1.188	0.2452	N.S.

t= Unpaired t Test with Welch correction, N.S.= Not significant result was found in Vaginal pH, Hb and ESR.

Table. 14: Average Effect of Therapy.

Cardinal Symptoms	Result in Percentage	
	Group a	Group b
Vaginal discharge	88.11%	74.23%
Dyspareunia	77.83%	75.47%
Pruritus Vulvae	73.40%	80.00%
Low Backache	51.67%	40.56%
Lower Abdominal pain	66.25%	50.00%
Burning Micturation	77.83%	91.78%
Sickness Feeling	55.56%	43.66%
Vaginal discharge byP/S	85.71%	74.23%
Oozing of blood from erosion	66.75%	62.26%
Area of eroded cervix	72.08%	67.57%
Cervical Tenderness	66.75%	65.00%
Nabothian cyst	74.91%	65.00%
Average Percentage of relief	71.40%	65.81%

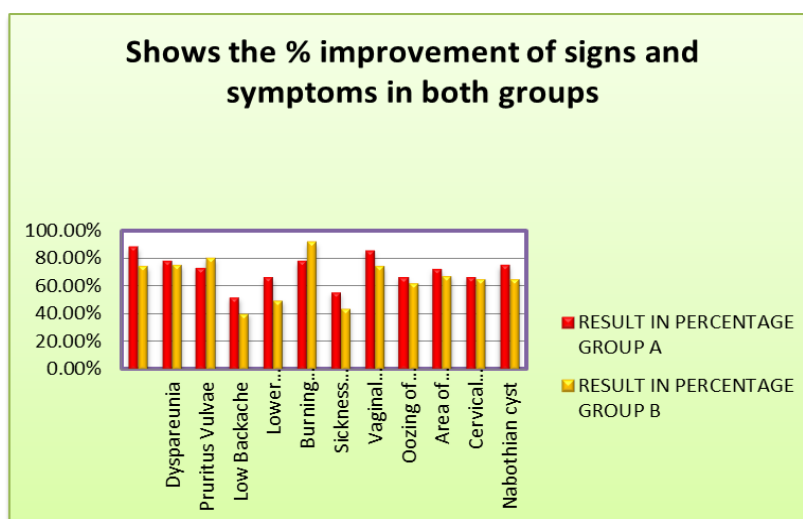
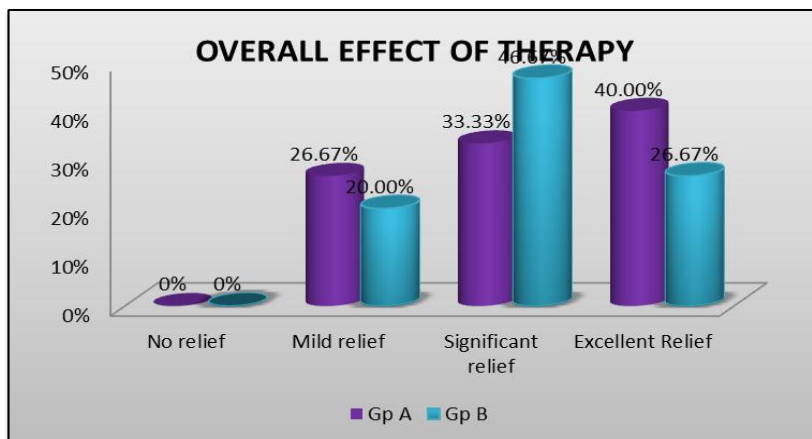


Table. 15: Overall Effect of Therapy.

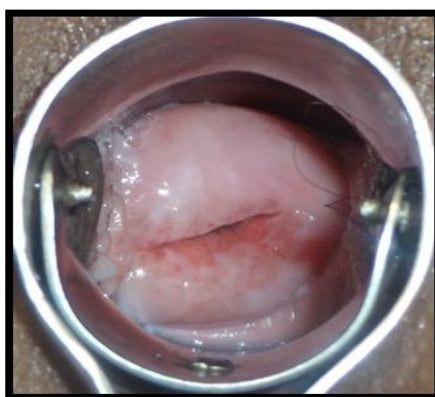
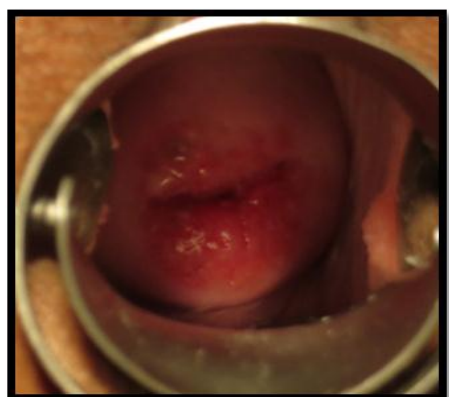
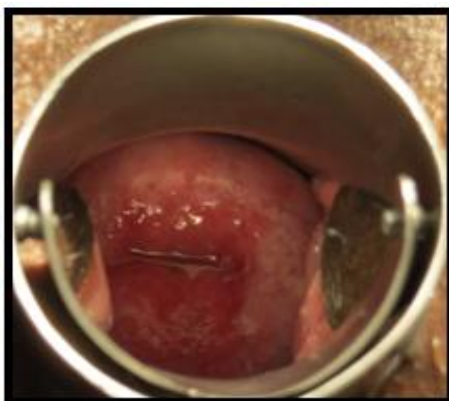
Effect of therapy	Result	No. of patients			
		Group A	%	Group B	%
No relief	0%	0	0%	0	0%
Mild relief	25%	0	0%	01	06.67%
Moderate Relief	26-50%	04	26.67%	03	20.00%
Significant relief	51-75%	05	33.33%	07	46.67%
Excellent Relief	76-100%	06	40.00%	04	26.67%

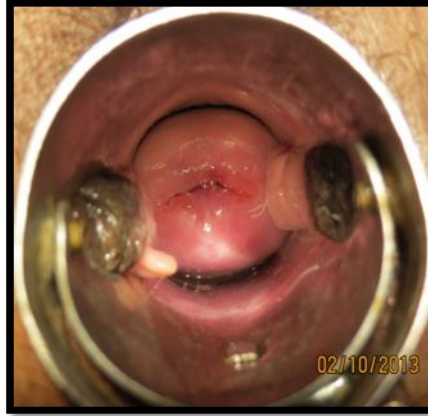
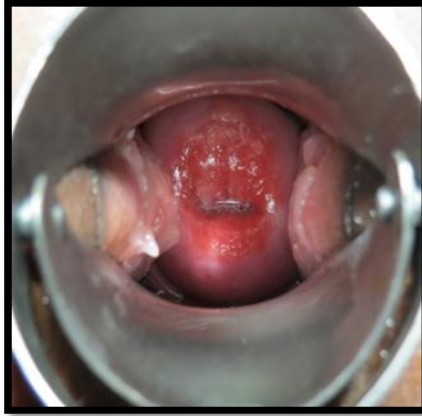


Effect of Treatment (Group A)

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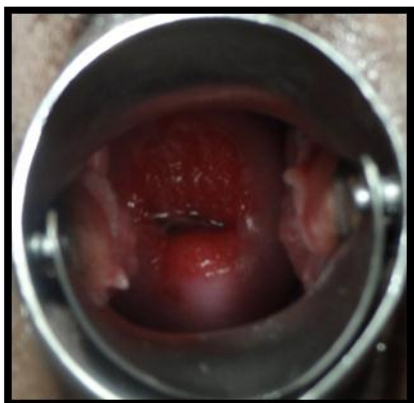




Effect of Treatment (GROUP B).

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DISCUSSION

The treatment of Cervical Erosion is mainly based on *Sthana*, *Lakhsna* and the *Doshaja* involvement. On these criteria, Acharya Charak has described *Kaphanashaka Chikitsa*. In *kaphanashaka chikitsa* Acharya Charak described *katu-tikta-kashaya-tikshna-ushna-ruksha-upakrama*.^[9]

Kshara^[11] (S.S.Su.-11/12) itself is *chedana*, *bhedan*, *shodhana*, *lekhniya karma* by its *tiksna*, *usna*, *laghu guna*. Due to its *chhedan*, *lekhan*, *shodhana karma* it was able to destruct the columnar epithelium without developing any complication like profuse vaginal discharge. Due to its *stambhana*, *shoshan* property it was able to decrease the amount of vaginal discharge. Due to *ropana*, *shoshana*, *sankochaka* property it was able to do re-epithelization of squamous epithelium in place of columnar epithelium. Due to *tikshan guna*, *krimihara*, *vishahara*, property it was able to minimize entry or development of any infection. Due to *pachana*, *vilayan*, *kapha-vata shamaka doshakarma* of *Palasha Kshara* were responsible for *samprapti vighatana* of *Karnini Yonivyapad* as vitiation of *vata kapha dosha* are responsible for this disease.

The classical drug '*Dhatakyadi Taila*' is one of the best drugs of Ayurveda, advised for local application in the management of *kaphaja yonivyapada*. Acharya Charaka^[9] has described (Ch.Chi. 30/78-81) that use of this oil cures the *yoni* associated with excessive unctuousness or discharges, *vipluta* and *upapluta yonivyapada* and *uttana*, *unnata* or *sunya yoni* and the one which is full of *sphota* (blisters) and pain.^[7] Describing the effectiveness of this oil Acharya mentions that with the use of this oil area of erosion is necrosed and dead tissue (*Dushta mamsa*) is removed than finally wound is healed by virtue of its *shodhana* and *ropana* properties.

The property of the each drugs in *Dhatakyadi taila* are *yonistravahara*, *raktashodhaka* & *raktastambhana*, *kandughna*, *krimighna*, *dahaprashamana*, *vedanasthapana*, *shulaprashaman*, *vranashodhana*, *vranaropana* and *vatakapha shamaka*. *Tila taila* is having *yonivishodhana* and *yonishoolnashaka* property. Thus the combined effect of drug is *shothahara*, *yonivishodhana*, *yonistrava - stambhaka*, *raktashodhaka* & *raktastambhaka*, *kandughna*, *krimighna*, *dahaprashamana*, *vranashodhana*, *vranaropana*, *vedanasthapana*, *yonishulnashaka* and *vatakaphashamak*.

By virtue of *sukshma*, *vyavayi* and *vikasi guna* of *tila taila*, the drug is easily absorbed through the mucosa. *Lekhna* property helps in scrapping of columnar epithelium and *shodhana* and *vatakaphashamaka* properties help in breakdown of the *dosha dushya sammurchana*. *Snigdha guna* of *Tila taila*, *dhataki*, *madhuka*, *utpala*, *srotanjana*, *sphatica*, *dadima*, *udumbar* and *godugdha* helps in correction of *Kha-vaigunya* of *artavavaha srotas*. Various clinical and experimental studies reveal that anti-inflammatory, Anticytotoxic and anti-microbial activities were present in almost 80-90% of drugs of *Dhatakyadi Taila*. Anti-inflammatory, Anticytotoxic effect of most of the ingredients in the drugs helps in proper healing and decrease the swelling and the redness of the cervix. Antibacterial, Antifungal, Antiseptic properties of the ingredients may help in preventing the foreign organisms which prevent the regeneration of the squamous epithelium.

The goal of any therapy should be to reduce symptoms, improving quality of life, prevent complication and side effects of that particular therapy.

Hence the *Ayurvedic* management seems to be more practical, effective, non surgical and have negligible side effects. So the drug of medicated *Palasha Kshara & Dhatakyadi Taila Pichu* have taken for the present study to find out which one is the better remedy for this disease.

CONCLUSION

Following conclusion can be drawn from the current research project

1. *Bahirparimarjana chikitsa* in the form of *Palasha kshara* and *Dhatakyadi Taila Pichu* (Group A) is highly effective (71.40%) in disintegration of the pathogenesis of the disease.
2. Re-epithelisation occurs earlier when both the trial drugs *Palasha Kshara* and *Dhatakyadi Taila Pichu* (Group A) are used in combination, it become more effective in removing of *karnika* (noboethian follicles) and managing the associated chronic cervicitis as compared to *Dhatakyadi Taila Pichu*.
3. No adverse effect or complications is produced with the use of this treatment.
4. Better results was observed in Group A, patients suggest that probably both the drugs *Palasha Kshara* and *Dhatakyadi Taila* act synergistically, the therapeutic effects are potentiated with the use of *Palasha Kshara* and *Dhatakyadi Taila Pichu*.
5. Comparing the symptomatic improvement in both groups it was found that overall relief was highest in group A followed by group B i.e. Hence it can be concluded that combined use of *Palasha Kshara* and *Dhatakyadi Taila Pichu* is effectively helps in managing the

disease cervical erosion. But in Pruritus vulvae and Burning micturation the relief was seen well in group B.

6. Infertility was not taken by me in assessment criteria. But I have observed relief in infertility associated due to the erosion. By this drug out of 30 registered patient 2 were conceived in each group after trial was completed. So the drug can use for the treatment of infertility associated with cervical erosion.

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