

Role of *Securinega leucopyrus* (Willd.) *Kalka* & *Khadirastaka Kwatha* in Managing Cervical Erosion: A Case Study

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ABSTRACT

INTRODUCTION:-The replacement of squamous epithelium of the ectocervix by columnar epithelium of endocervix is known as cervical erosion. The lesion may be asymptomatic or the following symptoms may be present like vaginal discharge i.e. mucoid, mucopurulent, offensive and irritant in presence of infection; may be even blood-stained due to premenstrual congestion. Post coital bleeding may be present. Associated cervicitis may produce backache, pelvic pain and at times, infertility. **MATERIALS & METHODS:** In the present study a 48 yrs old patient came to the OPD of Prasuti tantra & Stree roga IPGT & RA hospital, Jamnagar on 20/7/2019 with the symptoms like white discharge p/v, increased frequency of micturition, itching & burning vulva, pain & burning during coitus, weakness, inter menstrual & post coital bleeding. The pap smear report showed marked acute & chronic cervicitis. Then application of *Securinega leucopyrus* (Willd.) *Kalka Yonipichu* on cervix was done for 15 days at night and *Khadirastaka Kwatha* was given orally in 20 ml (made from 10 gm *Yavakuta*) b.d. dose before meal for 1 month. **RESULT:-**After 1 month of the treatment, all the above said symptoms has disappeared & the pap smear report was normal. **DISCUSSION:-**The drugs of *Khadirastaka Kwatha* possess *Vrana Shodhana*, *Ropana*, *Shothahara*, *Krimighna* properties. *Securinega leucopyrus* (Willd.) leaves also have *Lekhana* (scraping), *Shodhana* (cleaning) and *Ropana* (healing) properties. Thus the drugs help in healing of the cervical erosion. **CONCLUSION:-**As the chronic cervical infection or erosion can change into cervical cancer so it's a need of time to put forward some steps to prevent this condition. *Securinega leucopyrus* (Willd.) *Kalka Yonipichu* & *Khadirastaka Kwatha* had shown promising results in managing this ailment.

Key Words: *Cervical erosion, Cervical cancer, Khadirastaka Kwatha, Securinega leucopyrus* (Willd.) *Kalka, Yonipichu*

INTRODUCTION

Cervical erosion is the interplay between two epithelia. It is more common in reproductive age group women. It is asymptomatic in initial stage but in later stage, it progresses to show many symptoms like white discharge, itching, contact bleeding, dyspareunia etc. It adversely affects the physical health and psychological status of the women. Cervical cell pathology can be manifested as the following conditions: cervical erosion,

chronic cervicitis, cervical hypertrophy, multiple nabothian cysts, squamous metaplasia, cervical intraepithelial neoplasia (CIN), atypical squamous cells of undetermined significance (ASCUS), low-grade squamous intraepithelial lesion (LSIL/CIN-I), high-grade squamous intraepithelial lesion (HSIL/CIN-II), squamous cell carcinoma (CIN-III) etc¹. In Ayurvedic literature direct reference regarding the cervical pathology is not available. All the gynecological disorders are mentioned

under the concept of *Yoniroga*. It can be considered as *Garbhashaya Mukhagata Vrana* considering the pathology and the clinical features such as vaginal discharge and erosion. This terminology may be supported by the references of “*Yoni Vrana Darshana Yantra*” as mentioned by *Acharya Vagabhata*². *Garbhashaya Mukhagata Vrana* can be considered under the concept of “*Prajanana Vrana*” as mentioned by *Sushurta*³. 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 *Mukha* of *Garbhashaya*. In this case report application of *Securinega leucopyrus*(Willd.) *Kalka Yonipichu*(3gm dose) on cervix was performed for 15 days at night (up to urge of urination) and *Khadirastaka Kwatha* was given orally in 20 ml b.d. dose before meals for 1 month & these medication showed positive results in managing cervical erosion.

AIMS & OBJECTIVES

To manage cervical erosion through *Ayurvedic* medicaments mainly *Khadirastaka Kwatha* & *Securinega leucopyrus*(Willd.) *Kalka yonipichu*.

MATERIALS & METHODS

In the present study, a 48 yrs old female (she didn't attain menopause yet) patient came to the OPD of *Prasutitantra* & *Streeroga* Department, *IPGT* & *RA* hospital, *Jamnagar* on 20/7/2019, OPD No- 19047175, with the symptoms like white discharge p/v, increased frequency of micturition, itching & burning vulva, weakness since 1.5 yrs., pain (superficial)& burning during coitus, inter menstrual & post coital bleeding since 6 months. Firstly the general examination was done & the details are mentioned

Table 1 General examination

B.P.	P/R	R/R	Temp.	Built	Height	Weight	BMI
120/72mm of Hg	72/min	16/m	98.4 ⁰ F	Obese	1.56m	75kg	30.81 kg/m ²

in table 1. Gynaecological examination showed the signs of inflammation & cervical erosion. The details are shown in table 2& figure 1.



Figure 1 Appearance of cervix in BT

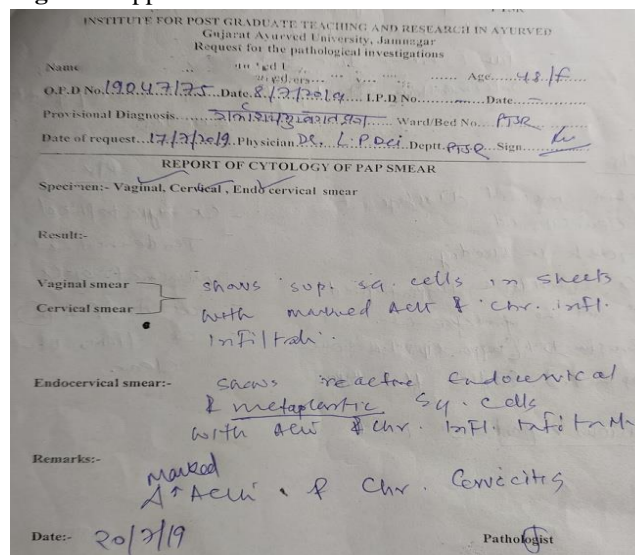


Figure 2 Pap smear Report (BT)

The pap smear report showed marked acute & chronic cervicitis as shown in figure no 2. Routine investigations were carried out both before and after the treatment. The values are listed in table 3. The treatment given was- *Khadirastaka Kwatha* orally in 20 ml b.d. dose before meal & local application (*Yonipichu*) of *Securinega leucopyrus* (Willd.) *Kalka* (3gms) on cervix. The details of treatment protocol & posology are mentioned in table 4. After taking the treatment for 1 month, all the symptoms were resolved & the pap smear report was normal.

Table 2 P/S-P/V findings before treatment

	P/S examination	P/V examination	
	BT	BT	
Vulva (inspection)	Normal	Uterus Size-	Normal
		Position –	Anteverted
Vaginal Discharge	Mucoid	Fornix-	Normal
Vaginitis	No	Cervix Consistency-	Firm
Cervix Size-	Hypertrophied		
Discharge	Mucoid	Movement	Tender
Erosion (% scale method)	present on upper & lower lip of cervix-		
Os-	75%, simple flat type		
Cervicitis	Parous		
	-present		

Table 3 Investigations carried out

Investigations	BT	AT
Hb	9.7 gm/dl	9.9 gm/dl
TLC	7600/ cumm	7600 /cumm
DLC	N,L,E,M- 62%,30%,05%,03%	N,L,E,M- 59%,33%,05%,03%
ESR	20mm/hr	20mm/hr
Platelet count	363000/ cumm	379000/ cumm
HIV/VDRL/HBsAg/HCV	Negative	Not done

Table 4 Treatment protocol followed in the patient

Drug	Dose	Duration	Time	Route
<i>Khadirastaka Kwatha</i>	20 ml(made from 10 gm <i>Yavakuta</i>) B.D.	1 month	Before meal	Orally
<i>Securinega leucopyrus kalka</i> made with <i>Tila taila</i>	3 gm (1.5gm of fine powder + 1.5 gm of <i>Tila taila</i>)	15 days	At night	Per vagina <i>Yonipichu</i> (after cessation of menses)

Table 5 Ingredients of *Khadirastaka Kwatha*

Drug	Botanical name	Part used	Quantity
<i>Khadira</i>	<i>Acacia catechu</i> (Linn.f) Willd	Dried <i>Twak</i>	1Part
<i>Haritaki</i>	<i>Terminalia chebula</i> Retz.	Dried <i>Phala</i>	1Part
<i>Amalaki</i>	<i>Embilica officinalis</i> Gaertn	Dried <i>Phala</i>	1Part
<i>Bibhitaka</i>	<i>Terminalia bellerica</i> Roxb.	Dried <i>Phala</i>	1Part
<i>Nimba</i>	<i>Azadirachta indica</i> A.Juss	Dried <i>Twak</i>	1Part
<i>Patola</i>	<i>Trichosanthes dioica</i> Roxb.	Dried <i>Panchanga</i>	1Part
<i>Guduchi</i>	<i>Tinospora cordifolia</i> (Willd.)Miers	Dried <i>Kanda</i>	1Part
<i>Vasa</i>	<i>Adhatoda vasica</i> Nees	Dried <i>Patra</i>	1Part

Table 6 Action of *Khadirastaka Kwatha*

Drug	Dosha karma	Pradhana karma
<i>Khadira</i>	<i>Kapha-Pitta Shamaka</i>	<i>Kusthghana</i>
<i>Haritaki</i>	<i>Tridosha Shamaka</i>	<i>Rasayana</i>
<i>Amalaki</i>	<i>Tridosha Shamaka</i>	<i>Rasayana</i>
<i>Bibhitaka</i>	<i>Tridosha(specially Kapha)Shamaka</i>	<i>Shleshmhara(chedana)</i>

<i>Nimba</i>	<i>Kapha Pitta Shamaka</i>	<i>Kandughana</i>
<i>Patola</i>	<i>Tridosha Shamaka</i>	<i>Jwaraghana</i>
<i>Guduchi</i>	<i>Tridosha Shamaka</i>	<i>Rasayana</i>
<i>Vasa</i>	<i>Kapha-Pitta Shamaka</i>	<i>Shleshmhara(chedana)</i>

Table 7 *Securinega leucopyrus kalka* ingredients

Drug	Botanical name	Part used	Rasa	Guna	Virya	Vipaka	Quantity
<i>Thumari(Katupilla)</i>	<i>Securinega leucopyrus</i> (Willd.) Muell	Dried leaves	<i>Tikta, Kashaya</i>	<i>Laghu, Ruksa</i>	<i>Shita</i>	<i>Katu</i>	1Part
<i>Tila Taila</i>	<i>Sesamum indicum</i> Linn.	Seed	<i>Kashaya, Tikta, Katu, Amla, Madhura</i>	<i>Laghu, Ruksa</i>	<i>Ushna</i>	<i>Madhura</i>	1Part

Table 8 Effect of therapy on parameters of cervical erosion

Parameters	BT	AT(after 1 month)	FU
<i>Yonisrava</i> (Vaginal discharge)	Mucoid (++)	Absent	Absent
<i>Yonikandu</i>	Present (+)	Absent	Absent
<i>Yonidaha</i>	Present (+)	Absent	Absent
Dysperunia (superficial)	Present (+)	Absent	Absent
Post coital bleeding	Present (+)	Absent	Absent
Intermenstrual bleeding	Present (+)	Absent	Absent
<i>Dourbalaya</i>	Present (+)	Absent	Absent
Pap smear	Marked Acute & chronic cervicitis	Normal pap smear	-

Table 9 P/S-P/V findings after treatment

P/S examination	AT	P/V examination	AT
Vulva (inspection)	Normal	Uterus size	Normal
Vaginal Discharge	No Discharge	Position	Anteverted
Vaginitis	No	Fornix	Normal
Cervix - Size	Mild Hypertrophied	Cervix –Consistency	Firm
Discharge	No	Movement	Freely mobile, Non Tender
Erosion	No erosion		
Cervicitis	No		

CASE REPORT

Personal history:

- Ahara* –Vegetarian diet with predominance of *Madhura rasa*.
- Vihara*- Sedentary life style & sound sleep of 7-8 hrs at night.
- Malappravriti* (Bowel habit) –normal ,1t/Day
- Mutrpravriti* (Micturition)- increased frequency of micturition i.e. 10- 12 times in day & 1-2 times in night.

Menstrual history-

- Menarche- 14 yrs
- LMP- 13/7/2019
- Duration 3 days
- Interval 30-35 days, Spotting in the intermenstrual period
- Painful & excessive bleeding with clots.

Obstetric history :-

- Married life- 32 yrs.
- G₇ P₅ A₂L₅D₀ (FTND at home)

Contraceptive history:-Tubal ligation -20 yrs back.

Coital history:- 1-2 times/week ,dysperunia(superficial)& post coital bleeding present.

Method of Khadirastaka Kwatha preparation⁴

Table 5 shows the ingredients of *Khadirastaka kwatha*⁵. As per the standard method of preparation of *Kwatha*, the drugs were cleaned & boiled with 16 times water and reduced to 1/8th. Then the prepared *Kwatha* was cooled down and filtered.

Method of Pichu preparation:-Table7 shows the ingredients of *Securinega leucopyrus Kalka*⁶. A fine powder was made from dried leaves of *Securinega leucopyrus*(Willd.). Then1.5 gms of this powder mixed with 1.5 gms of *Tila taila* until it got transformed into a smooth paste. Then this mixture (total 3gms) was put in a guaze piece & tied up like a *Pichu*.

RESULTS

After BT, the assessment was done after 15 days & there was improvement in sign & symptoms. White discharge, *Yonikandu*, *Yonidaha*, *Dourbalaya* were reduced up to 50 %. The squamous epithelium had grown in between the eroded area. AT was taken after 1 month of BT & the cervix was healthy as shown in figure 3. Pap smear report was normal as shown in figure 4. After taking the treatment for 1 month, all the symptoms were resolved as mentioned in table 8&9. The follow up was taken after 1 month of AT & the cervix was healthy, results are shown in table 8.



Figure 2 Appearance of cervix in AT

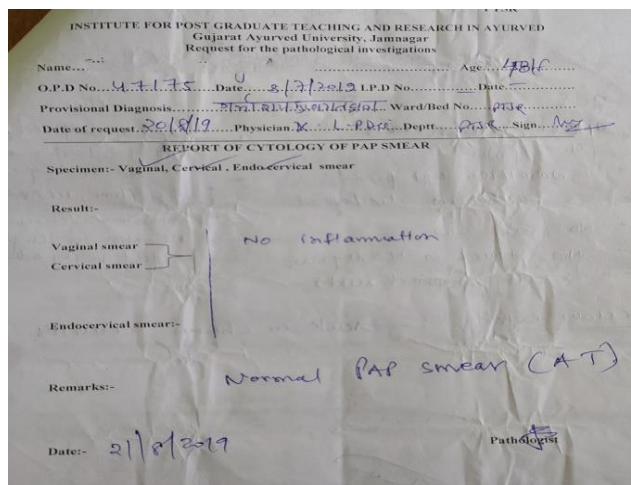


Figure 4 Pap smear Report (AT)

DISCUSSION

Cervical erosion is the commonest cause of white discharge per vagina, dyspareunia and postcoital bleeding. Modern treatment for cervical erosion is cauterization & cryosurgery which is expensive and have side effects like secondary infertility, bleeding per vagina, infection, cervical stenosis etc^{7,8}. The basic treatment of erosion is to destroy the outgrown columnar epithelium, so the replacement of columnar epithelium takes place by squamous epithelium & the erosion heals.

Probable mode of action of therapy

The drugs of *Khadirastaka Kwatha* are *Kapha-Pittahara* mainly and have action particularly on *Rasa, Rakta* and *Mamsa Dhatu*⁹. *Dosha Karma & Pradhana Karma* of *Khadirastaka Kwatha* are mentioned in table 6. Most of the drugs are possessing *Vrana Shodhana, Ropana, Shothahara, Krimighna, Rakta Shodhaka* and *Kandughna* properties. The drugs also possess anti inflammatory, anti ulcer, immunomodulatory, anti viral, antifungal, antimutagenic and anticarcinogenic properties. Thus the drug helps in enhancing the healing process and preventing the recurrence of cervical erosion. *Thumari* leaves has a broad spectrum antimicrobial activity. *Securinega leucopyrus*(Willd.) leaves act as an antiseptic. It has *Lekhana* (scraping), *Shodhana* (cleaning) and *Ropana* (healing) properties. So both the drugs due to their properties helps to heal the erosion.

CONCLUSION

The results of this case study shown complete resolution of symptoms & sign of cervical erosion. It is a burning problem of women in today's era because the symptoms like discharge per vagina, backache etc are quite annoying to compete with the day to day activity of women. The vulnerable group for cervical cancer is premenopausal age & non-healing or recurrent cervical erosion can lead to cervical cancer in future. In this case study, *Securinega leucopyrus kalka yonipichu* & *Khadirastaka Kwatha* are found to be very effective in subsiding the symptoms & the cervical erosion itself.

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