ORIGINAL ARTICLE

“Evaluating the Efficacy of Intra vaginal Application of Palashadi Yoga in Management of Shweta Pradara with special reference to Abnormal Vaginal Discharge”

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ABSTRACT:

Background: *Shweta Pradara* here can be understood as abnormal vaginal discharge. Certain form of discharge is always prevalent in women genital tract, but when the discharge is associated with itching, abnormal odor, excess amount, abnormal color, burning sensation or associated urinary symptoms then it is considered to be abnormal one. Women are always prone to several forms of infection in their genital tract. It ranges from simple form of infectious discharges to malignant conditions in the genital tract. **Aims and Objectives:** To evaluate the efficacy of intra-vaginal application of *Palashadi Yoga* in *Shweta Pradara* (abnormal vaginal discharge). **Materials and Methods:** Total 20 clinically diagnosed patients of *Shweta Pradara* from OPD & IPD of NIA, out of which 15 patients completed the trail. *Palashadi Yoga* was introduced intra vaginally for 7 alternate days till 2 consecutive cycles. **Results:** All the results calculated by using Online InStatGraphPad software. Statistically extremely significant results in subjective symptoms like-Discharge per vagina and pain in lower abdomen were seen. Very significant result were seen in vulvar itching and backache. Significant result was seen in color change of discharge before and after treatment. Out of total 15 patients, 8 patients had normal lactobacilli in vaginal swab culture. Among 7 patients, 4 of them had Coagulase Negative Staphylococci, 1 had Bacterial Vaginosis, 1 had Candida and 1 had mixed infection of Candida and Kliebsella. The overall pathogen clearance rate was 57.14%. **Conclusion:** Management of abnormal vaginal discharges with

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intra-vaginal application of *Palashadi Yoga* is helpful in managing infections.

Keywords: *Shweta Pradara*, *Palashadi Yoga*, abnormal vaginal discharge, vaginal infection, Ayurveda

INTRODUCTION:

A certain amount of discharge is always evident in females. When normal it will never cause feeling of extra wetness in vulva, associated with other features like itching, burning sensation, foul smell and pain. Sometimes dyspareunia, burning micturition can also be associated. So deviation from the normal criteria every other discharge can be categorized in abnormal vaginal discharge. Most of the times, the natural defense system of vagina is intact, whereby it clears off infections. But, due to many reasons when the natural environment of vagina is disturbed it invites various sorts of infection to its tract.

Every year in US 7.4 million new cases of bacterial vaginosis occur.¹ An estimate of 3 million cases of trichomoniasis occurs each year in US.² The worldwide prevalence of trichomoniasis is 174 million that accounts for 10-25% of all vaginal infections³. Abnormal vaginal discharge is the characteristic feature of vulvo-vaginal infections. It occurs in 1-14% of all women of reproductive age throughout the world and its prevalence in India is estimated to be 30%⁴. Most of the documented cases of symptomatic vaginal discharge includes bacterial vaginosis, followed by vulvo-vaginal candidiasis, and trichomoniasis⁵. The number is quite large compared to the strength of the diseases. The prognosis of abnormal vaginal discharge is that it doesn't have fatal effects but can definitely hamper quality of life.

Shweta Pradara is not mentioned as a separate clinical entity in classics, but it can be considered as a symptom in many *Stri Roga*. Mostly all *Acharyas* described white vaginal discharge as *Shweta Pradara*. *Acharya Vrinda Madhava* on 9th century A.D. first coined the word "*Shweta Pradara*". Thus, *Shweta Pradara* can be compared with abnormal vaginal discharge on the basis of its cardinal feature "white or yellowish-white discharge per vagina" as well as on the basis of similar causative factor, signs and symptoms.

Though the treatment of abnormal vaginal discharges is based on kind of infection but

treating empirically is very much evident. The re-occurrence of vaginal infections leading to abnormal vaginal discharge is very common. So, there has to be an intervention which will help in killing causative pathogens and maintaining healthy vaginal floras. Ayurveda explains both oral and local procedures like *Yoni Varti dharana* (vaginal tablets), *Pichu dharana* (medicated tamponing), *Yoni Prakshalana* (Vaginal douching), *Yoni Avachuranana* (introducing dry antibacterial, antifungal herbal powders), *Pariseka* etc. for the treatment of different types of *Srava* (discharges). Among many *Palashadi yoga* is a soft form of vaginal tablet introduced into vaginal canal and this study was carried to understand the efficacy of the herbal suppositories in abnormal vaginal discharge.

AIMS AND OBJECTIVES: To evaluate the efficacy of *Palashadi Yoga* intravaginal application in *Shweta Pradara* (abnormal vaginal discharge).

MATERIAL AND METHODS:

Selection of the patients:

Total 20 clinically diagnosed patients of *Shweta Pradara* from OPD & IPD of NIA, Jaipur were selected for the present clinical trial and informed consent was obtained. Out of which 15 patients completed the course of treatment. The study started after approval of Institutional Ethics Committee, letter no. IEC/ACA/2017/39 dated 26/04/2017. This Clinical trial was registered retrospectively under Clinical Trials Registry India, CTRI/2018/10/016115 on 9/17/2018.

Diagnostic Criteria:

Patients were diagnosed on the basis of classical signs and symptoms of abnormal vaginal discharge. The discharges should be associated with either any of the infective symptoms like itching, odor, varied color, altered amount, pain lower abdomen or any associated urinary symptoms.

Method of research: The method adopted in present study was open randomized clinical trial.

Drug: The drug *Palasadi Yoga* for the present study has been selected from *Charak Samhita* ⁶ and it was prepared according to classical reference in the Pharmacy of National Institute of *Ayurveda*, Jaipur.

Criteria for selection of patients:• **Inclusion criteria:**

1. Patients complaining of abnormal vaginal discharge as a cardinal symptom.
2. Age group between 20 to 45 years.
3. Married women.

• **Exclusion criteria:**

1. Unmarried girls.
2. Post-Menopausal women.
3. Pregnant women.
4. Any type of malignancy.
5. Patients having STDs.
6. Patients with any Systemic diseases.
7. Patient having any organic pathology of reproductive organs like Cervical Polyp, Fibroid uterus etc.
8. Any discharges mixed with blood, urine or fecal matters.

• **Withdrawal criteria:**

1. During the course of clinical trial, if patient develops any serious condition which requires urgent treatment.
2. If patient wants to withdraw from clinical trial.
3. Irregular follow-up & non-compliance.

• **Investigations:**

1. Routine blood investigation: CBC, ESR, VDRL, HIV, HbsAg, LFT, RBS, RFT were advised to all

the patients before commencement and CBC, ESR after completion of trial.

2. Complete urine examination:
3. pH of vagina:
4. Vaginal swab for wet mount and culture:
5. Pap smear:
6. Sonography (U.S.G.):

Method of administration of Drug:

The patient was asked to empty bladder and wash the genital area. Then she was kept in lithotomy position. Gloves were worn. The genital was cleaned with betadine solution. Beforehand ,5 gm of palashadi yoga was mixed with honey just to hold the materials and was filled in inserter. The inserter was inserted intravaginally upto cervix. The material was pushed near the posterior fornix. The patient was kept in position for 5-10 mins then send. Again patient was asked to visit one day after. On next visit the vaginal tract was washed with distilled water and again the material was inserted. The process goes upto 7 settings of medicine insertion on alternate days. The process can be started after cessation of cycle.

Follow up:

- Patients were followed after every 15 days and then final assessment was done after completion of 2 months.
- Improvement and other side effects were noted.

Ingredients of Palashadi Yoga:Table.no.1.Ingredients of *Palashadi Yoga*.

S.No.	Drug Name	Latin Name	Part Used
1	Palasha	Butea monosperma Linn	Twak (stem cover)
2	Sarja	Shorea robusta Gaertn.f.	Niryas (gum extract)
3	Jamun	Syzygium cumini Linn	Twak (stem cover)
4	Samanga	Mimosa pudica Linn	Panchang(whole plant)
5	Moch	Salmaaliala malabarica Schott & Endt	Niryas(gum extract)
6	Dhataki	Woodfordia fruticosa Kurz	Flower

Overall effect of treatment:

The score of individual symptoms were obtained before and after treatment. The total effect of therapy was assessed accordingly in terms of-

- Relief of subjective parameters (amount of discharge, consistency, color, dyspareunia, burning micturition, pain in lower abdomen.
- Relief of objective parameters (local tenderness of fornix, foul smell,)
- Decrease of Pus cells in wet mount (vaginal discharge)
- Maintenance of normal pH level.

Criteria of assessment-

The improvements in the parameters were assessed mainly on the basis of relief in the signs and symptoms of the disease. To assess the effect of therapy all the signs and symptoms were scored depending upon their severity. Scored as following grading's- 0,1,2,3.

Statistical analysis- Various observations made and results obtained were computed statistically using Wilcoxon matched-pairs signed-ranks test, Paired 't' test, to find out the significance of the values obtained and various conclusions were drawn accordingly. All the results calculated by using Online InStatGraphPad software.

P value

- $P > 0.05$ - Not significant or not quite significant (NQS)
- $P < 0.05$ - Significant (S)
- $P < 0.01$ - Very significant (VS)
- $P < 0.001$ - Highly significant (HS)

Results:

There was highly significant results in subjective symptoms like-Discharge per vagina and pain in lower abdomen. Very significant result were seen in vulvar itching and backache. Significant result was seen in color change of discharge before and after treatment. But not significant results were seen in consistency, foul smell, local tenderness, burning micturition and dyspareunia. The table shows significant improvement in Vaginal pH and vaginal pus cells. Rest of the laboratory results are found not significant. Out of total 15 patients, 8 patients had normal lactobacilli in vaginal swab culture. Among 7 patients, 4 of them had Coagulase Negative Staphylococci, 1 had Bacterial Vaginosis, 1 had Candida and 1 had mixed infection of Candida and Kliebsella. The overall pathogen clearance rate was 57.14%. 2 cases of CoNS, 1 Candida and 1 mixed Candida and Kliebsella were cleared off after completion of study.

Discussion:

Table no.5. Probable mode of action of drugs in *Palashadi Yoga*:

Drugs	<i>Dosagnata</i>	<i>Karma</i>	<i>Rogagnata</i>	Pharmacological action
<i>Palasha</i>	<i>Vata-Kapha Shamaka</i>	<i>Stambhana, Lekhana, Shothahara, Vedanasthapan, Bhedana, Mutrala, Sandhaniya, Vishaghna, Rasayana, Vranashodhana & Vrana ropana.</i>	<i>Pradara, Mutravardha, Vrana, Yonistrava, Agnimandya, Krimi Shula, Mutrakrichchhrra, Daha, Daurbalya,</i>	Anti-helminthic anti-estrogenic antifungal, antispasmodic, Astringent, bactericidal,
<i>Sarja</i>	<i>Pitta-Kapha Shamaka</i>	<i>Vranashodhana, Vranaropana, Sandhaneeya, Jantughna, Vedanasthapan, Stambhana Kaphanissaraka, Kaphadaurgandhyahara, Mootrasangrahaneya, Garbhashayashothahara, Yonisravahara, Kushthaghna,</i>	<i>Shweta-Pradara, Yonivyapada, Kan-du, Vrana, Shotha, Vedana, Twagvikara, Raktsrava, Pandu, Pooyameha, Agnidagdhavrana, Krimi,</i>	Inhibitory, astringent

<i>Jamun</i>	<i>Kaphapitta Shamaka, Vata Vardhaka</i>	<i>Stambhana, Mootrasangraheeya</i>	<i>Raktasrava, Vrana, Daha, Sannipatajwara, Charmaroga, Agnimandya, Shoola, Phiranga, Upadansha.</i>	Antivir Anti-inflammatory, Anti Anti Anti-viral
<i>Samanga</i>	<i>Kapha-Pitta Shamaka</i>	<i>Grahi, Kaphahara, Pittahara, Sandhaniya, Vranaropana</i>	<i>Sopha Daha, Vrana, Yoniroga</i>	Antim Anti-microbial Antifungal, wound healing, antioxidant
<i>Moch</i>	<i>Kapha-Pitta Shamaka</i>	<i>Vranaropana, Vishaghna, Grahi, Krimighna, Raktashodhaka, Kaphaghna, Mootrala., Balya,</i>	<i>Shothahara</i>	Leucorrhoe
<i>Dhataki</i>	<i>Kapha-Pitta Shamaka</i>	<i>Jantughna, Vranashodhaka, Vranaropana, Stambhana, Sandhaneeya,</i>	<i>Daha, Vrana, Sangrahani, Shwetapradara., Krimi,</i>	Antibiotic, antifungal, antiviral

Here majority of the drugs are exhibiting the desired effect of *Sthambhana, Kandughna Durgandhyanasan, Jantugna/ Krimighna, Sothahara, Soolagna, Rasayana, Mutrala, Lekhana, Vrana sodhana/ropana* properties.

The excessive *Srava* is controlled with *Stambhaka Karma*. The *Lekhana Karma* helps in scraping of unhealthy tissues (inflamed tissues) in the vaginal tract. The *Krimighna/ Jantugna* effects help to kill the pathogens in the tract. The *Kandugna* effects helps to relieve from itching. Owing to the *Durgandhyanasan* property of the drugs it helps to get rid of foul smell from discharges. The *Mutrala* effects help in relieving the burning sensation during micturition which is often associated with vaginal infections. The *Sothagna* effect helps to relieve the local inflammation undergoing inside the vaginal tract and sometimes in vulva too. The *Vatahara* and *Kaphahara* effects help in management of pain and excessive formation of *Srava* respectively. The drugs also exhibiting *Sodhana* and *Ropana* properties that helps in cleaning or sterilizing the vaginal tract and healing the vaginal epithelium. The *Soolagna* property helps in relieving the lower abdominal pain or back pain that seems to accompany vaginal infections in cases of pelvic inflammatory diseases. The *Rasayan* effects of drugs help in overall maintenance of vaginal ecosystem. Thus the combination of drugs in both the groups i.e. *Yoga* seems to be a complete approach in managing abnormal vaginal discharge.

Pharmacologically also almost all the drugs are exhibiting anti-bacterial, anti-fungal, anti-viral, astringent, anthelmintic, aromatic properties. Many of them, also showing anti-oxidant properties owing to which faster healing and lesser cellular damage can be predicted.

Use of honey as a *Yoga* binder also has major function to perform. Owing to its *Lekhanam*, *Sandhanam*, *Shodhanam*, *Ropanam*, *Chedanam*, *Sangrahi* actions. It shows that it acts synergistically with the *Yoga* to bring the desired effect of elimination of abnormal vaginal discharge. Many studies have shown its anti-microbial, antioxidant, anti-inflammatory, anti-cancer and wound healing activity.⁷

Table no.6. *Rasa Panchaka* of *Palashadi yoga*-

<i>Rasa</i>	<i>Guna</i>	<i>Virya</i>	<i>Vipaka</i>
<i>Katu</i> = 2/6	<i>Laghu</i> = 5/6	<i>Ushna</i> = 1/6	<i>Katu</i> =6/6
<i>Tikta</i> = 2/6	<i>Snigdha</i> =2/6		
<i>Kashaya</i> = 6/6	<i>Rukshya</i> =4/6	<i>Sheeta</i> = 5/6	
<i>Madhura</i> = 2/6	<i>Pichhila</i> = 1/6		

1) **At *Rasa* level:**⁸

Here majority of drugs have *Kashaya rasa*, which has main function of *Sangrahi*, *Sandhaniya*, *Vrana pidaniya*, *Ropaniya* properties. It dries up excessive *Kleda* from the body. It has *Rukshya*, *Sheeta*, *Guru guna*. *Tikta* rasa has *Vishanasak*, *Kriminasak guna*, brings *Sthirta* (integrity) in *Twacha* and *Mamsa*. It also dries up excessive *Kleda*, *Pooya*, *Kapha* in body owing to its *Lekhana* property. *Katu* rasa has *Kandu Vinasan* property and *Vrana ropana* properties. It cleans up *Srotas* also has *Krimighna* and *Lekhana* property. *Madhura* rasa has *Vishanasak*, *Vayunasak*, *Pittanasaka*, *Dahasaman*, *Sandhaniya* properties.

2) **At *Vipaka* level⁹ :**

In *Palashadi yoga*, 6 out of 6 drugs have *Katu Vipaka*, which increases *Vata*. Here *Shweta Pradara* is a state of excessive *Kapha* dominance where increment of *Vata* factor helps in drying of excess secretions.

3) **At *Guna* level:**

Majority of the drugs have *Laghu*, *Rukshya* *guna* which are opposite to that of *Kapha*. Few of them have *Snigdha* and *Pichhila* *guna* to bring out a complete harmonization so that *Vata* is not

provoked, though little action of *Vata* is desirable in this context.

4) **At *Virya* level:**

Majority drugs show *Sheeta virya*, which has tendency of *Vishyandana*, *Sthirikarana*, *Prasadana kledana*, *Stambhana* properties.

Some drugs work on the basis of *Rasa* some on *Guna*, some on *Virya* and some by *Vipaka* and some by *Prabhava*¹⁰.

As a result of the clinical trial done on total 15 patients of *Shweta Pradara* following conclusion:

- 2 patients out of 20 had their infection flared up with increased discharge. So they were dropped out from the study. The excessive discharge was managed within 3rd day with repeated use of *Gokhsur Siddha Jala*. No significant adverse effect was seen. It can be due to many causes like the patient didn't follow up the instruction well or may have attained some nosocomial infections. Otherwise the treatment was found safe in all the remaining patients. So this treatment is found to be safe, economic, and effective. It can be recommended for the management of *Shweta Pradara*.
- Considering the time bound duration of study

with small sample size and limited resources for conducting this clinical trial, drawing concrete and precise conclusions would be premature so number of patients in large scale will be more valid in suggesting efficacy of the drug.

CONCLUSION:

Thus *Palashadi yoga* a very simple combination of herbs to be introduced locally on vaginal canal helps in managing varied range of infections.

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CONFLICT OF INTEREST: Author declares that there is no conflict of interest.

SOURCE OF SUPPORT: None

REFERENCES:

(Endnotes)

- 1 Vaginitis. NHIONDEmand.Available at <http://content.nhiondemand.com/psv/Hc2.asp?objID=100638&cType=hc>.
- 2 CDC.Tracking the hidden epidemics 2000: trends in STDs in the United States. Centers for Disease Control and Prevention, Sexually Transmitted Disease. Available at-www.cdc.gov/std/Trends2000/trichomoniasis.htm
- 3 Vaginitis. NHIONDEmand.Available at <http://content.nhiondemand.com/psv/Hc2.asp?objID=100638&cType=hc>
- 4 Namrata Kalia et al ,Prevalence of Vulvo-vaginal infections and species specific distributon of

vulvovaginal candidiasis in married women of North India ,www.ijcmas.com,surfed on 5/5/19

- 5 Kalia Namrata, Singh Jatendra,Sharma et al , Prevalence of Vulvovaginal Infections and Species Specific Distribution of Vulvovaginal Candidiasis in Married Women of North India, www.ijcmas.com,surfed on 5/5/19
- 6 Charak chi *Chikitsasthan* 30/122-123
- 7 Pasupuleti VisweswaraRao^a et al ,Biological and therapeutic effects of honey produced by honey bees and stingless bees: a comparative review, <https://www.sciencedirect.com/science/article/pii/S0102695X16301843>
- 8 Dr Laxmidhar Dubedi, Dr B.K Dubedi,Charak Samhita,Sutrasthana 26,sloka 42 onwards, pn- 486 -499. Choukhambha Krishnadas Academy, Varanasi, Edition :2016
- 9 Dr Laxmidhar dubedi, Dr B.K Dubedi,Charak Samhita, , Sutrasthana 26,sloka 42 onwards, pg - 486 -499, Choukhambha Krishnadas Academy, Varanasi, Edition :2016
- 10 Dr Laxmidhar dubedi, Dr B.K Dubedi,Charak Samhita,Choukhambha Krishnadas Academy, Varanasi, Edition :2016, Sutrasthana 26, sloka no.71 pg- 501

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Table no.2: Shows the pattern of clinical recovery in various Subjective and Objective Parameters of *Shweta Pradara* in 15 patients treated with “*Palashadi Yoga*” vaginally by Wilcoxon matched-pairs signed-ranks test

S.No.	Symptoms	BT	AT	Diff	% Imp.	SD	SE	P value	Sig
1.	Discharge per vagina	1.333	0.1333	1.200	90%	0.4140	0.1069	<0.0001	H.S
	Consistency	1.267	1.200	0.0667	5.26%	0.5936	0.1533	0.4089	N.S
	Color	0.6667	0.2667	0.4000	59.99%	0.5071	0.1309	0.0156	S
2.	Vulvar itching	1.133	0.4667	0.6667	58.84%	0.3519	0.09085	0.0020	VS
3.	Foul smell	1.733	1.467	0.2667	15.38%	1.033	0.2667	0.1085	N.S
4.	Backache	1.067	0.4667	0.6000	56.23%	0.7037	0.1817	0.0020	V.S
5.	Pain in lower abdomen	1.200	0.4667	0.7333	61.10%	0.5606	0.1447	0.0005	H.S
6.	Local tenderness	1.467	1.200	0.2667	18.17%	0.7432	0.1919	0.1085	N.S

7.	General weakness	1.133	1.667	-0.5333	47.06%	0.5164	0.1333	0.0105	S
8.	Burning micturition	0.8000	1.067	-0.2667	33.33%	0.9411	0.2430	0.1504	N.S
9.	Dyspareunia	1.800	1.333	0.4667	25.92%	1.082	0.2795	0.0549	NS

Highly significant results seen in discharge per vagina (90%) and improvement in pain in lower abdomen (61.10%). Very significant results seen in vulvar itching (58.84%) and relief in backache (56.23%). Significant result seen in color of discharge (59.99%) and general weakness (47.06%). Non-significant results seen in consistency of discharge (5.26%), foul smell (15.38%), improvement in local tenderness (18.17%), improvement in burning micturition (33.33%) and improvement in dyspareunia (25.92%).

Table no.3: Showing effect on various laboratory parameters of *Shweta Pradara* in 15 patients treated with *Palashadi Yoga*.

S.No.	Group B	BT	AT	Diff.	% Imp.	SD	SE	T	P value	Sig
1.	Hb gm%	10.750	10.807	-0.05667	0.52	0.4411	0.1139	0.4975	0.3133	NS
2.	ESR	12.600	13.200	-0.6000	4.76	1.639	0.4231	1.418	0.0890	NQS
3.	TLC	6926.7	6866.7	60.000	0.86	213.14	55.032	1.090	0.1470	NS
4.	Vaginal PH	1.667	1.067	0.6000	36	0.9103	0.2350	2.553	0.0115	S
5.	Vaginal Pus Cells	1.600	1.133	0.4667	30	0.6325	0.1633	2.432	0.0145	S
6.	Urine Epi. Cells	0.9333	0.7333	0.2000	21.42	0.6761	0.1746	0.1356	1.146	NS
7.	Urine WBC	0.9333	0.8000	0.1333	14.28	0.6399	0.1652	0.2166	0.8069	NS

Table no.4 showing effect of therapy in treating organisms in vaginal discharge

Sr. No.	BT	AT (vaginal swab culture)		% relief of therapy in treating organism
	Pathogens present	Pathogens absent (cured)	pathogens still persist	
1.	7 patients.	4	3	57.14%