



A PILOT STUDY ON AYURVEDA MANAGEMENT OF VULVITIS

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ABSTRACT

Introduction: Vulvitis is common among females of all age groups but remain neglected due to unawareness and private nature of pathology. The cardinal features include itching vulva, vaginal discharges, pain, renal problems and patches on vulvar region. In *Ayurveda* the *Acharna* and *Vipluta yonivyapad* has close relation with vulvitis. In present study vulvitis patients were treated by *Triphala kwath* sitz bath and lotion made of *Gomutra arka*, *suddha Tankan* and *Gandhak rasayan* (GTG Lotion). **Aims and objective:** To evaluate the efficacy of *Triphala kwath* sitz bath and GTG lotion as an effective and palatable management of vulvitis. **Materials and Method:** 10 patients from outdoor department of Stree roga & Prasuti were taken for study. Therapy includes *Triphala kwath* sitz bath for 10 minutes and GTG lotion application on vulva and medial aspect of thighs for 10 minutes once in a day. The two sittings of therapy each for 15 days at the interval of 15 days was applied for continue 2 months. Assessment of results was done by special grading system on subjective and objective parameter. **Results:** The therapy shows statistically highly significant results i.e. $P < .0001$ in all features of vulvitis. **Discussion & Conclusion:** The root cause of *Acharna* and *Vipluta yonivyapad* is unhygienic conditions, *dosha dusti* and *krimi utpatti*. *Triphala kwath* and contents of GTG lotion provide promising results in vulvitis due *Vatakaphaghan* and *krimihar* i.e anti microbial properties. Thus, the *Ayurveda* therapy in form of *Triphala kwath* sitz bath and GTG lotion application is highly effective, palatable and economical for all age group female patients of vulvitis.

Keywords: *Ayurveda* , *Gomutra*, *Krimi*, *Triphala kwath*, Vulvitis.

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INTRODUCTION

Vulvitis is commonly encountered pathology among females. Even though the vulva is most observable female genital structure, but it get least concern in medical literature and has even been referred to as “the forgotten pelvic organ”^[1]. About 10% of *cases of gynaecology involved with* vulvar region ^[2]. Vulvitis remain underdiagnosed and undertreated for years due to negligence and private nature of the pathology may further diagnosed as malignant conditions ^[3]. The disease affects all age group of females, study suggest that nonspecific vulvovaginitis ranges for 25% to 75% of the vaginitis found in adolescents age group females ^[4].

Vulvitis stand for inflammation of external female genitalia and usually used for group of symptoms originate due to various gynaecological diseases ^[5]. The root cause of Vulvitis is unhygienic conditions associated with infection, allergies, scratching and local irritants results intense cellulitis ^[6]. The cardinal features include itching, vaginal discharges, pain in lower abdomen and renal complaints along with excoriation of the skin due to scratching and laceration ^[7]. The treatment modalities in modern science are limited upto the use of corticosteroids and hormonal therapy ^[8].

The causes and cardinal features of vulvitis directly matches with the *Acharna* and *Vipluta yonivyapad* mentioned in *Ayurveda* ^[9,10]. These *yonivyapad* (Gynecological pathologies) are mainly caused by unhygienic conditions lead to vitiation in *Vatakapsha doshas* and origin of *Krimi* ^[11,12]. These vitiated *doshas* along with *krimi (micro organism)* alter the normal vaginal mucosa and vulval epithelium results in cellulitis. Due to which the defense of external genitalia and associated organs compromised resulting in itching, vaginal discharges, pain and other complications. The management *Krimija roga in Ayurveda* gives more emphasis on *Nidan parivarjan* and *Prakriti Vighat* for correction of vitiated *Doshas* and removal of *Krimi* in that particular area ^[13]. The drugs which work on *Vatakapsha doshas* and *krimi* are best suited for management of vulvitis. So, the local application of drug in form of Sitz bath by *Triphala kwath* and lotion made by *Gomutra arka*, *suddha Tankan* and *suddha Gandhak rasayan* (GTG lotion) were selected in order to correct *doshas* and *krimi* removal for management of Vulvitis.

AIMS AND OBJECTIVES:

Evaluate the efficacy of Indigenous drugs for management of vulvitis.

MATERIALS AND METHODS:

Selection of Patients: Ten cases of Vulvitis confirmed by clinical and physical examination

from the OPD of *Stree roga* and *Prasuti Tantra* department of *Gurukul Govt. Ayurveda* college and hospital, UAU, Haridwar; were selected for pilot study.

Detailed history, physical examination were performed and all routine investigation done on all patients.

Inclusion Criteria:

1. Married or Unmarried Female patients of 16-45 years age group.
2. Patients with cardinal features of Vulvitis i.e. intense itching, vaginal discharges, pain and burning micturition.

Exclusion Criteria:

1. Patient with systematic disorders and any debilitating disease.
2. Pregnant women and menopausal women were excluded from study.
3. Procedure was not performed during menstrual phase

Investigations: Haematological evaluations by Hb%, TLC, DLC, ESR, Blood sugar, routine and microscopic urine were done in all patients. Other investigations to rule out any systemic disorder were also performed in required subjects.

Selection of Drug and Route of administration: All ten patients were subjected to a single group and treated by mentioned drugs and procedure as below.

1. Sitz bath by *Triphala kwatha*

2. Local application of GTG lotion made by *Gomutra arka*, *suddha Tankana* and *Suddha Gandhaka rasayan*.

Method of Drug preparation:

Triphala kwath preparation for sitz bath was done by taking 50 gms of *Triphala Yavakoot* (coarse powder of *Triphala*) soaked in 1 litre of water overnight and boiled till 250 ml of water remain than stir it and mixed in lukewarm plain water for sitz bath.

GTG lotion was made by proper *Mardan* of equal amount of 2 gm *Suddh Tankan* and 2 gms *Suddha Gandhak rasayan* in 5 ml of *Gomutra arka* than dilute the whole in 100 ml of *Gomutra arka* and stored in sterile bottle for regular usage.

Details of Procedure applied for drug administration:

1. **Sitz Bath by *Triphala kwath* method:** The 250ml of *Triphala kwath* diluted in luke warm plain water in customize amount, so that the whole pelvic area properly immersed. The patient was advised to sit in diluted luke warm *Triphala kwath* for 10 minutes once in day.
Around 250 ml diluted *Triphala kwath* keep aside before taking sitz bath, which will further use for cleaning the lotion.
2. **Lotion Application method:** After taking Sitz bath, perineal area wiped out by sterile towel and GTG lotion was advised to apply on effected area of vulva and

internal aspect of thighs for 10 minutes
than clean the exposed by luke warm
diluted *Triphala kwath*

Duration of Treatment: continuous 15 days in
every month for consecutive two months.

Follow of period: Two months.

Criteria of Assessment: Assessment of result
was done based on specific scoring system on
Subjective and Objective Parameters for
vulvitis.

Subjective criteria includes four cardinal
symptoms itching, pain, discharge, Burning

micturition were analyzed on the basis of
grading system [Table No.1].

Objective criteria: All objective parameters
were assessed by physical examination of
patients. That included measurement of
patches on vulva by measuring tape,
appearance of morphology of patches,
redness and swelling and number of patches
by vulval inspection [Table No. 2].

Table No. 1 Grading system for Assessment of results on cardinal symptoms:

Subjective Parameter	Severity	Grade
Itching	Severe continuous in day and night hampered daily routine ashamed in publicly	3
	Vigorous during night time	2
	Occasional not effected daily routine	1
	Absent	0
Vaginal discharge	Undergarment becomes wet all time need for vaginal pad	3
	Undergarments become wet but no need of vaginal pad	2
	Occasional not moisten the undergarments	1
	Absent	0
Burning micturition	Severe and continue	3
	Moderate and intermittent	2
	Mild and occasional	1

	Absent	0
Pain in lower abdomen	Severe referred to back and medial aspect of thighs	3
	Moderate, feeling of heaviness in lower abdomen	2
	Mild degree	1
	Absent	0

Table No. 2 Grading system for objective parameters assessment:

Objective criteria		Grade	Grade
Size of patches, redness or swelling		>3 cm	3
		<3 cm – 2 cm	2
		<2 cm-1 cm	1
		Absent	0
Number of patches		>10	3
		<10-5	2
		<5-1	1
		Absent	0
Morphology of patches, redness or swelling	Hypopigmented patches	White	3
		Hypopigmented on margins and white in centre	2
		Only hypopigmented not white	1
		Absent hypopigmentation	0
	Patches with Redness and swelling	With Soreness and tenderness	3
		Without soreness and tenderness	2
		Only elevated patches with redness	1
		Absent redness and swelling	0

Observations and Results: The observations made on demographic distribution of patient are tabulated in [Table no. 3]. Results of subjective parameter and objective parameter subjective in [Tables No.4, 5]

The results show moderate improvement in cardinal symptoms of vulvitis and the patches or redness swelling due vulvitis also subside effectively following treatment. The statistically significant outcomes are stated by applying paired t test.

Table No. 3 Observations on Demographic profile of 10 Patients:

Observations	Number of patients	
Age group 16-35 years	10	100%
Married	3	30%
Unmarried	7	70%
Hindu religion	6	60%
Urban area	6	60%
Lower middle Socio economic status	7	70%
Working Occupation	7	70%
Use of sanitary pad during menstruation	6	60%
Regular use of synthetic underarments/tight denims more than 8 hours per day	8	80%
Use of IUCD	2	20%
Multiparous	2	20%
History of abortions	2	20%
General observations on dietary habits, Rasa dominancy, physical history		
Vishamasan	7	70%
Akala bhojan	7	70%
Mandagni	5	50%
Lavankaturassevan	6	60%
Mutra vegavidharan	6	60%

PurishVishtambh	5	50%
Disturbed sleep	6	60%
Addiction of tea/ coffee	7	70%
History of local antifungal, antibiotic ointment application	10	100%

Table No. 4: Assessment of Results on Subjective parameters:

Subjective parameter	Mean	Mean	SD		SE	Df	t	P	%	Result
	B.T	A.T	B.T	A.T			(paired)	value	Relief	
Itching Vulva	2.10	0.40	.57	.52	.153	9	11.12	.0001	85%	HS
Vaginal Discharge	1.90	0.40	.74	0.52	.22	9	6.70	.0001	79%	HS
Burning Micturition	1.40	0.30	.52	.48	.10	9	11.0	.0001	78.52%	HS
Pain in Lower abdomen	1.90	0.60	.74	.52	.153	9	8.51	.0001	73.68%	HS

(N=10)

Table No. 5: Assessment of Results on objective parameters:

Objective parameter		Mean		SD		SE	Df	t	P	% Relief	Result
		B.T	A.T	B.T	A.T			value	value		
Size of patches		1.8	.40	.79	.52	.16	9	8.57	.0001	77.77%	HS
Number of patches		1.7	.50	.82	.52	.30	18	3.88	.001	70.58%	S
Morphology	Hypo-pigmented	1.67	.50	.82	.55	.30	5	3.79	.01	70.05%	S

	Redness and swelling	1.75	.50	.50	.58	.38	6	3.27	.01	71.42%	S

(N=10)

DISCUSSION

Discussion on Vulvitis in relation of *Acharna*

and *Vipluta Yonivyapad*: The perineal skin defence is lost in moisture and trauma results in vulvitis; Ayurveda define the same concept under the *Acharana* and *Vipluta Yonivyapad*. The main cause of *Acharna* and *Vipluta* are *Yoni Adhavanat* means lack of regular perineal cleaning leads to pathological microorganism proliferation in that particular area i.e. *Krimi or Jantu utapatti*. The etiopathogenesis of vulvitis can be understood as the *Kha Vaigunayat* i.e. disturbed perineal defense due to unhygienic conditions ultimately provoke the *Vata kapha doshas* and *krimi* origin in that particular area. These *doshas* alter the functional and anatomical integrity of vulvar and vaginal region associated with secondary infection i.e. *krimi utapatti*. The Constant vaginal discharges due to altered vaginal flora makes vulvar area moisten leads to local irritation and intense itching desire. Ultimately result in scratching patches or redness and swelling on vulvar area and favor the growth of various micro organisms. Renal problems, pain in lower abdomen and thighs

originate when pathology adversely affects the associated organs due inflammation and congestion.

Discussion on demographic profile: All patients i.e. 100% were belong from 16-35 years age group, these figures support the previous prevalence studies data that vulvitis is very common complaint in all age group of female patients. 70% patients were unmarried, working and all were using tight synthetic undergarments or tight denim outfits on regular basis during their working hours. Thus the data suggest that the unmarried, younger group and working females are more prone to vulvitis because they were using these outfits more frequently for longer time as compared to married and housewives females. 30% married housewives females who were not using sanitary pads and having history of abortions or IUCD were found to be affected by Vulvitis. These facts suggest that unhygienic conditions during menstrual phase along with IUCD or previous abortions history can be a potent source for microorganism proliferation. Maximum number of patients i.e. 70% having history of

irregular dietary habits and tea addiction; 60% patients suppress the natural urge of micturition. The reason behind these figures related to the working females who spent most active day time on their workplace so, missed the proper timing of food intake and addict for tea or coffee for alertness, thus suppress the natural urges of appetite, micturition due to workload or shyness. In this way the *Visham Kala Bhojan*, *Vega Vidharan* indirectly contributing as causative factors of vulvitis. All patients i.e. 100% were having history of self-treatment by corticosteroid, antifungal ointments due to unawareness and private nature of disease that's why the vulvitis always a under diagnosed and untreated disease and leads to many complications.

Discussion on mode of action of drugs on Vulvitis: *Acharna* and *Vipulata Yonivyapad* are *Vatakaphaj* and *Krimi janya* consist very close to Vulvitis. So, the drugs and procedure having *Vatakapha Shamak* and *krimighan* properties were selected. *Yoniprakshalan* by *Triphala kwath* is mentioned for vaginal discharge [14]. *Triphala* is a *tridoshic rasayana* having immunomodulatory, anti-inflammatory, anti-microbial properties [15]. *Yoniprakshalan* can be used only in married patients so; it is replaced by Sitz bath because it can be used in both married as well unmarried patients. *Acharya Charaka* mentioned the use of *katu*

tikta kashaya kshara and *ushna* drugs for *prakriti vighat* of *krimiya roga* [16]. The lotion made of *Gomutra arka*, *suddha Tankan* and *Gandhak rasayan* (GTG lotion) having similar properties. *Gomutra* contain *doshahar* and *krimihaar* i.e. antimicrobial properties [17]. *Suddha Tankan* is tetra boric acid shown highly effective against various bacterial and fungal strains like *E. coli*, *P. aeruginosa*, *S. aureus*, *S. pyogenes* and fungal strains *C. albicans*, *A. niger* and *A. Clavatus* [18]. *Gandhak rasayan* is processed sulphur known for its excellent anti fungal and anti bacterial action in various disorders [19]. All constituents of GTG lotion are proven for its anti fungal, anti bacterial properties by classical and recent researches. The results of study shown that *Triphala kwath* Sitz bath along with GTG lotion significantly reduced ($P<.0001$) the vaginal discharges i.e. 79% due to *Kashaya*, *Ruksha* and *Stambhan* properties. The anti-inflammatory action of *Triphala kwath* sitz bath reduce inflammation and congestion in the associated organs urethra, and pelvic genital organs results in significant improvement ($P<.0001$) in burning micturition i.e. 78.52% and pain in lower abdomen i.e. 73.68%. The antimicrobial properties of GTG lotion combined with the *Rasayan* properties and *Shothahar* properties of *Triphala kwath*, so helps to regain the perineal skin defense and reduce microbial load thus markedly

reduce ($P<.0001$) in itching sensation i.e. 85% . Thus the local application of both drugs that is *Triphala kwath* sitz bath and GTG lotion are found very effective in the management of Vulvitis.

This study was conducted on only 10 patients and got very significant and quick results. The larger group of patient should be study to establishing the *Ayurveda* as a potent management of vulvitis.

CONCLUSION

Acharna and *Vipulata Yonivyapad* are *Vatakaphaj* and *Krimijanya* consist very close to Vulvitis due to similarity in symptoms and causative factors. It can be concluded that the combined therapy in form of Sitz bath by *Triphala kwath* and GTG lotion application on vulvar area significantly improves all symptoms of vulvitis due to its *VataKaphahar* and *Jantughan* properties. The drug and procedure are simplified, palatable and cost effective for females of each age group, occupation, and socio-economic status of society.

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