



EFFECT OF INTERNAL ADMINISTRATION OF GANDHAKA RASAYANA AND YONIPRAKSHALANA WITH KHADIRA KASHAYA IN VULVO-VAGINAL CANDIDIASIS – A CASE STUDY

Dr Vidya K P, Dr Salini P
Assistant Professor, Professor
KUHS

Abstract :

Vulvo-vaginal complaints are the most common complaints for which the women seek medical care. Its prevalence is 35% in India ⁽¹⁾. Vaginitis is defined as a variety of inflammatory conditions that can result in vaginal and sometimes vulvar symptoms such as itching, irritation, burning sensation, odor and discharge. Among many causes of vaginitis, Vulvo-vaginal candidiasis is the second most common cause after Bacterial vaginosis. There are several antifungal creams and tablets which are found to be effective in the management of this disease. But, majority of them acts only for a short period of time. This disease has a higher recurrence rate; hence a treatment modality for curing and preventing the recurrence is a need of hour. This disease can be compared to *Slaishmiki*, *Vipluta*, *Acarana* or *Upapluta yonivyapath* in *Ayurveda*. This is the case having symptoms of Vulvo vaginal candidiasis which was treated with Ayurveda medicines and procedure. The symptoms of Vaginal discharge, pruritus and burning sensation were relieved after the treatment.

IndexTerms – Gandhaka Rasayana, Khadira, Yonikshalana, Vulvo vaginal Candidiasis

I. INTRODUCTION

Vulvovaginal candidiasis is one among the vaginal infections which causes the most distressing and irritating sufferings of the womanhood such as curdy white vaginal discharge, vulvar pruritus etc. About 75% of women experience this disease at least once in their life ^(2, 3). Worldwide, recurrent VVC affects about 138 million women annually (range 103–172 million), with a global annual prevalence of 3871 per 100 000 women; 372 million women are affected by RVVC over their lifetime. The 25–34 year age group has the highest prevalence. *Candida albicans* is responsible for 85-90% of vaginal yeast infections ⁽³⁾. *Candida* normally lives inside the body in places such as mouth, throat, gut, vagina and skin without causing any problems. Sometimes *Candida* can multiply and cause an infection if the environment inside the vagina changes in a way that encourages its growth. Candidiasis in the vagina is commonly called as Vaginal Yeast Infection or Vaginal Candidiasis, Vulvo-vaginal candidiasis, Moniliasis or *Candida Vaginitis* ⁽⁴⁾

NEED OF THE STUDY.

The number of patients with Vulvo-vaginal candidiasis is increasing day by day in the OPD of Prasutitantra & Striroga. So many antifungal drugs are available for external wash as *kashaya* and are effective in controlling infection. In modern medicine also, antifungal creams, preparations and vaginal tablets are available for the treatment of candidiasis. In spite of all these remedies, it seems the recurrence rate is more. It also affects the women psychologically. Hence, a treatment modality is selected which may be effective in both curing and preventing the recurrence of the disease. The main intention of the study is not only to cure the disease but also to prevent its recurrence. Thus Two medicines were selected i.e, *Gandhaka Rasayana* tablet internally and *Khadira kashaya* for *Yoniprakshalana*.

3.1 Case Report

The patient is a 28-year-old female with a history of recurrent *Candida albicans* (*C. albicans*) vaginal colonization. Her vaginal symptoms include Curdy white vaginal discharge, itching vulva and burning sensation which aggravates specially around her periods. She is immunocompetent and has experienced 4–5 episodes of *Vulvo vaginal candidiasis* per year.

Risk Factors:

The patient had numerous risk factors for developing candidiasis such as ⁽⁵⁾

- eating excessive amounts of sugar
- unhygienic practices
- wearing tight, and wet garments (occasionally)
- antibiotics
- Obesity : Body weight 64kg Body height: 151cm BMI: 28.5

Diagnosis: The Subjective criteria were assessed by LIKERT scale and an objective criterion was assessed by Wet mount test.

3.2 Subjective parameters

- White creamy curdy vaginal discharge
- Itching
- Burning sensation
- Erythema

Objective parameters

- Wet mount test- KOH Preparation

3.3 Treatments given

Gandhaka rasayana was given internally in tablet form for 7 days in 2 consecutive cycles and Yoni prakshalana was done with Khadira kashaya for 7 days for 2 consecutive cycles after the bleeding phase.

RESEARCH METHODOLOGY

Study design:

A clinical study with pre and post evaluation

Study setting: OPD of P.N.N.M Ayurveda Medical College and Hospital, Cheruthuruthy

Treatment:

Khadira kashaya for Yoni kshalana

48g of *sookshma choorna* was taken in one litre water and was reduced to 800ml. Contents were filtered and cooled to room temperature & was taken for *yoniprakshalana*.

Method of administration of *Yoni Prakshalana*:

- The procedure of Yoniprakshalana was done for two consecutive months after the bleeding phase
- 1st visit: starting from the day just after the stoppage of menstruation for 7 consecutive days in the 1st month of drug administration
- 2nd visit: starting from the day just after the stoppage of menstruation for 7 consecutive days in the 2nd month of drug administration

Method of application of *Yoniprakshalana* with *Khadira kashaya*:

The patient is advised to empty the bladder and then made to lie down in dorsal position. Under aseptic precautions, vulval area is swabbed with cotton soaked in prepared *khadira kashaya*. A douch can filled with the *Khadira kashaya* is kept in a higher position than the body which is connected to a rubber tube. The other end of the tube connected to a nozzle of 7cm which introduced into the vaginal canal and the *kashaya* will be administered in a continuous flow with slow pressure till the *kashaya* is finished, i.e. 800ml.

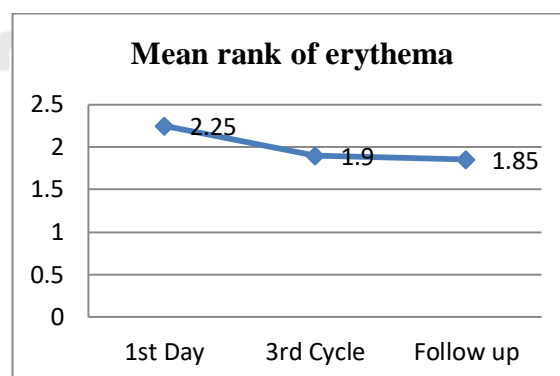
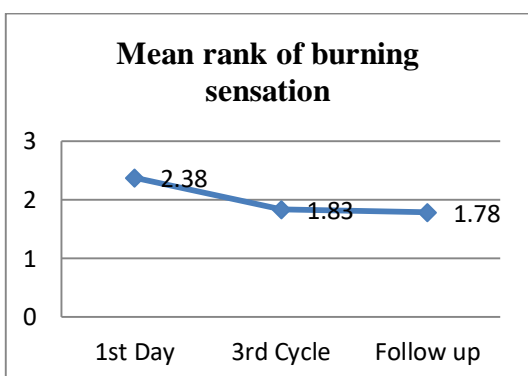
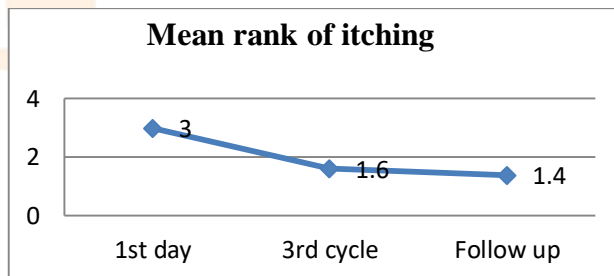
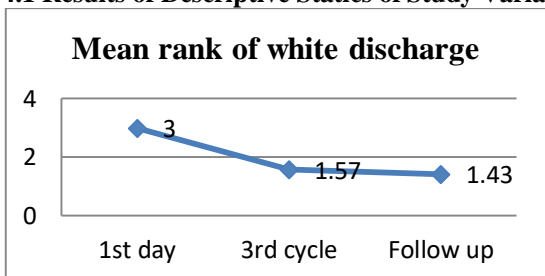
Internal administration of *Gandhaka rasayana*

Patient was given Gandhaka rasayana in tablet form which was purchased from GMP certified company. For every month, the procedure of *Yoniprakshalana* was carried out for 7 days after bleeding phase for two consecutive months. While patient approached for procedural compliance, internal medication for one month is provided. Methods of administration of drug were well explained to the patient along with written advice in their own local language. During each visit 1 packet each containing 14 tab of *Gandhaka Rasayana* was given for 7 days. Patient was advised to take 1 tablet each in morning and evening along with one glass of milk.



IV. RESULTS AND DISCUSSION

4.1 Results of Descriptive Statics of Study Variables



The discussion is divided into

1. Conceptual study.
2. Analytical study

Conceptual study on the disease

Vulvovaginal candidiasis is a very common gynaecological disorder which affects women of all age groups. About 75% of women will experience at least one episode of candidiasis in their lifetime. Unfortunately, few are plagued with chronic, recurrent infections. *Candida albicans* thrives on carbohydrate and likes an acidic medium⁽³⁾. Some of the risk factors include unhygienic practices, faulty food habits, systemic illness such as Diabetes mellitus, use of IUCD and antibiotics etc. Several environmental factors can also contribute to the development of VVC.

The clinical features of VVC include:

- Thick curdy white vaginal discharge
- Vulvar pruritus

The associated complaints include burning sensation, erythema and dyspareunia.

While analysing the *Nidana* and *lakshana* of VVC, it shows resemblance with

- *Vipluta/Acharana*,
- *Upapluta*
- *slaishmiki yoni vyapat*.⁽⁶⁾

As per *Ayurveda* classics, *Mithyachara* is one among the *Nidana* of *Yoniroga*. *Mithyachara* includes both *Mithya Ahara* and *Vihara*. The present study shows the consumption of *Abhishyandi ahara* and *Atimadhura ahara* as *Mithyahara* and *Viharas* like unhygienic practices, sedentary life styles, irregular sleeping habits and unprotected sexual activity can be included under *Mithyaviharas* which play a contributory role in the development of VVC. *Pradushta Artava*, *Beeja dosha*, use of *Apadravya* and other unknown factors also constitutes the *Nidana* of *Yoni roga*. Due to *Mithya ahara sevana*, there is *rasa dhathu dushti* and *Kapha prakopa* which takes *Sthanasamsraya* in *yoni*. Due to *Mithya viharas* like unhygienic practices, there is development of *Krimi* in *yoni*. Together, they produce symptoms like *Sweta pichila yonisrava* and *kandu*. Decreased *vyadhikshamatwa* can result in the recurrence of this disease.

Analytical study on the treatment given

Effect of treatment on White discharge

This is mainly due to the *Khadira kashaya yoni kshalanam*. *Khadira* has *Kashaya Tikta rasa*. *Kashaya Tikta rasa dravya* has *Sodhana* and *ropana* properties. Hence it helps in *Srotosodhana* and in maintaining normal vaginal epithelium. It also has *Kleda hara* and *Kapha Soshana* property which helped in reducing white discharge per vaginum⁽⁷⁾⁽⁸⁾.

Gandhaka rasayana has *Kapha hara* and *Pithavardhaka* property. Hence it stimulates the *Agni* and the subsequent formation of *Poshaka Rasa dhathu* which further gets transformed into *Utharothara dhathus* and the ultimate essence of metabolism i.e *Ojas* is formed which increases the *Vyadhikshamatwa* thereby preventing the recurrence rate.

Effect of treatment on itching and burning sensation

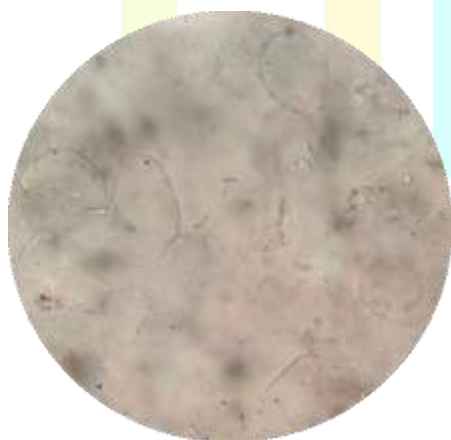
This is due to *Kapha-pithahara*, *Kandughna* and *raktashodhaka* properties of *Khadira kashaya*. Moreover, it is seeta veerya. It is noticed that burning sensation is mainly due to excessive itching and not observed as a main symptom. Hence if the symptom of itching is relieved completely, the burning sensation is also relieved.

Marked improvement in erythema may be due to the action *khadira* as it is *Raktha sodhaka*, *Pitha samaka*, and *Twak prasadaka*. *Gandhaka rasayana* might have helped in the tissue remodeling.

Before treatment



After Treatment



Probable Mode of Action

Khadira kashaya

In this study, *Khadira kashaya* was selected for *Yoni prakshalana*. Our *Acharyas* have explained the mode of action of *dravyas* in 3 ways. They are:

1. *Dravya prabhava*
2. *Guna prabhava*
3. *Dravya guna prabhava*

On the basis of *Dravya prabhava* ^{(7),(8)}

Khadira has *Kashaya rasa* and *Tikta rasa* which are having predominance of *Vayu* and *Prithvi mahabhoota*. It acts as *vranashodhaka ropaka* and *kledasoshaka* due to its *mahabhoota* dominance. Hence it leads to *sravasosha* (decrease in vaginal discharge). The *ropana karma* helps in remodelling of granulation tissue. As *kashaya* and *tikta rasa* have *pitha hara karma*, they possess anti-inflammatory action which cures the vulvo-vaginitis and associated symptoms of *raga* (erythema), *daha* (burning sensation) etc.

On the basis of *Guna prabhava*

Khadira drug has *katu vipaka* and *laghu rooksha guna*. These qualities help in reducing *kapha* thereby reduces *srava* and *kleda*. Thus *Guna* and *Vipaka* of the selected drug checks the vaginal discharge and itching.

On the basis of *Dravya guna prabhava*

Here the *dravya prabhava* can be considered as *Krimighna karma*. The extracts of *Acacia catechu* exhibits various pharmacological effects like antipyretic, anti-inflammatory, antidiarrhoeal, hypoglycaemic, hepatoprotective, antioxidant and antimicrobial activities. The methanolic extract of this plant was found to have antimicrobial activities against six species of pathogenic and non-pathogenic microorganisms: *Bacillus subtilis*, *Staphylococcus*, *Salmonellatyphi*, *E.coli*, *Pseudomonas aeruginosa* and *Candida albicans*.

Gandhaka rasayana

Rasayanas are exclusive procedures/formulations which provide factors for initiation and formation of healthy tissues. Hence it promotes positive health and vigour, retards aging process and increases longevity in individuals by increasing immunity in the body, thus making the body to resist against the factors causing ailments. *Gandhaka Rasayana* is one such formulation described in *Yogaratanakara* under *Rasayana adhikara* which is extensively used in treatment of *kandu*, *kushta*, *visha* etc and other systemic disorders like *Atisara*, *grahani*, *prameha* and *somaroga*. The ingredients of *Gandhaka rasayana* are ⁽⁸⁾.

1. *Sudha gandhaka*
2. *Chathurjataka*
3. *Triphala*
4. *Bhringaraja*
5. *Ardraka*

Sudha gandhaka is the main ingredient of this formulation. Sulphur as a free element is not absorbed in the body but can be ingested as organic and inorganic sulphates^(9,10). In *Gandhaka rasayana*, when sulphur undergoes *bhavana* with many herbal drugs, it transforms into organic and inorganic sulphates thus increasing its extent of absorption. The steroids in *Gandhaka rasayana* possess strong anti-inflammatory action. While analysing the properties, *Gandhaka*, *Bhringaraja*, *Ardraka* and the ingredients of *Chathurjataka* have *Kaphavatahara* properties. *Triphala* is *tridosahara* and is having *rasayana guna*. Hence *Gandhaka rasayana* in general is *tridosha samaka* predominantly of *kaphavatahara* property. Being a *rasayana*, this formulation helps in the formation of *utharothara dhatu* and *ojas*⁽¹¹⁾. So *Gandhaka rasayana* not only helps in curing, but also helps in preventing the recurrence of this disease.

II. ACKNOWLEDGMENT

Dr. Vineesh: Thanks. Dr Akhil: Thanks.

REFERENCES

1. Ashwini Bhalerao Gandhi , Ameya Purandare , Kavitha Athota , Priya Ganesh Kumar , Sudha Tandon⁵ , Shobhit Seth^{6,*}, Poonam Shah, Vulvovaginal candidiasis: Epidemiology, treatment and prevention strategies <https://pdf.ipinnovative.com/pdf/17093>
2. Sobel JD, Faro S, Force RW. Vulvovaginal candidosis: epidemiologic, diagnostic, and therapeutic considerations. *Am J Obstetrics and Gynecol.* 1998; 178:203-211.
3. Dawn C S, Dawn S. Textbook of Gynaecology, Contraception and Demography.
4. Linhares LM, Witkin SS, Miranda SD, Fonseca AM, Pinotti JA, Ledger WJ. Differentiation between women with vulvovaginal symptoms who are positive or Negative for *Candida* species by culture. *Infect Dis Obstet Gynecol.* 2001;9(4):221–25. [PMC free article] [pubmed] [Google Scholar]
5. Dou N, Li W, Zhao E, Wang C, Xiao Z, Zhou H. Risk factors for candida infection of the genital tract in the tropics. *Afr Health Sci.* 2014;14(4):835-839. doi:10.4314/ahs.v14i4.10
6. Tewari P V, Kaśyapa Samhitā or Vrūddhajīvakīya Tantra, English translation And Commentary, Chaukhambha Viswa Bharati, Varanasi, 9th Edition 2004, Kalpasthana; Chapter 2/18; P.No 327.
7. Dr. JLN Sastri, Dravyaguna vijnana- Vol -2, Chaukhambha Orientalia, Reprint edition 2010, Varanasi, p.919
8. Negi, B.S., Dave, B.P. In Vitro Antimicrobial Activity of *Acacia catechu* and Its Phytochemical Analysis. *Indian J Microbiol* **50**, 369–374 (2010). <https://doi.org/10.1007/s12088-011-0061-1>
9. Asha Kumari, P.V Tiwari. Yoga Ratnakara, Rasayanadhikara. Chaukhambha Viswabharati Office., 1st edition . Varanasi; 20010. p.1249
10. Prasanna Kumar T, Vijay Kumar GS, Yumnam DD. In-vitro antifungal activity of *gandhaka rasayana*. *International Journal of Ayurvedic Medicine* 2010;1(2):93-99
11. Saokar RM, Sarashetti RS, Kanthi V, Savkar M, Nagthan CV. Screening of Antibacterial and Antifungal Activity of *Gandhaka Rasayana*- an Ayurvedic Formulation. *International Journal of Recent Trends in Science And Technology* 2013; 8(2):134-137