

REVIEW OF LITERATURE OF KAPHAJA YONIVYAPAD AND VULVO VAGINAL
CANDIDIASIS (CANDIDA ALBICANCE) WITH IT'S CORRELATIONPriyanka Kurkute^{1*} and Veena Jawale²¹Post Graduate Scholar, Prasuti-Tantra Evum Stree-Roga Department, S.G.R.A. Collage Solapur.²H.O.D and Professor, Prasuti-Tantra Evum Stree-Roga Department, S.G.R.A. Collage Solapur.

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ABSTRACT

Nowadays health of women is getting affected by stressful lifestyle, improper food habits; a social status which leads to a higher incidence of vaginal white discharge. It is a disorder of *kapha* and certain characteristics are observed such as white sticky, discharge, heaviness, giddiness etc. its cause discomfort to the woman and hamper their day-to-day activities and may neglected and prone to pathological condition one of them is candidiasis. Hence, here is our small initiative, we tried to understand all about *Kaphaj Yonivyapada* and gathered information on all possibilities of its root and related things in view to curing this *Kaphaj Yonivyapada* with candidiasis.

INTRODUCTION

In today's era, women have to carry out different tasks, from housewife to professional disciplines, she is also devotional and fasts as well as a junk food consumer sometimes. Everyone expects that she should be the best at each task. While performing all her duties she compromises many times with her general health conditions, and it is habitual in our society. She often neglects to take care of herself, mostly in regard to her hygiene, thus she is prone to various *Yonirogas*.

According to *Acharya Charaka*, there are twenty types of *Yonivyapada* describes *Yonivyapad Adyaya of Chikitsa Sthan*^[1] *Acharya Sushruta* description of *Yonivyapad Pratishedha, Adhyay of Uttartantra*.^[2] *Astang Hrudaya*^[3] and *Astang Sangrah*^[4] describes 20 *Yonivyapad in Guhyaroga Vignaneeya Adhyaya of Uttartantra* one of them is *Kaphaj Yonivyapada* *Kaphaj Yonivyapad* is a condition in which *Pichhila Strav* from the vagina with *Kandu, Sheetalata, Alpavedana*^[5] is present. All these features can be correlated with vulvovaginal candidiasis in which pruritus vulva, vaginal soreness, thick curdy white discharge often adherent to vaginal wall.^[6]

A fungal infection caused by yeast like micro-organism is called candida. Among them *Candida Albicans* is the commonest species, which is a gram-positive and grows an acidic medium. Almost 25% of women harbour candida in vagina.^[7] Prevalence rate of vulvovaginal candidiasis is 7%.^[8] As a part of natural protection.

Ayurvedic concept^[9]*Yonivyapada*

योनि + नव + आपद = योनिव्यापद

In Ayurveda, main *Streeroga* was described under the chapter of *Yonivyapada*.

Yoni is very important organ for process like fertilization, implantation and birth process. If *Yoni* gets not proper functioning or there is a defect in anatomical structures, then there is pathological process will be start. we called as *Yonivyapada*. Total *Yonivyapada* is 20 in number.

*Kaphaj yonivyapad*A specific group of the diseases of women i.e., *Yonivyapad* has been mentioned in Ayurvedic classics, which disrupts the women hood in various ways.

Kaphaja Yonivyapad is one of those diseases. Vaginal discharge means *Yonistrava* is seen as a symptom in case of this disease.

Etiology (Nidan) of *yonivyapad*^[10]

कफोऽभिष्यन्दिभिर्वृद्धोयोनिचोदूषयेत्त्रियाः।

स कुर्यात् पिच्छिलां शीतां कण्डुग्रस्ताल्पवेदनाम्॥

पाण्डुवर्णा तथा पाण्डुपिच्छिलार्तवाहिनीम् ॥ च चि. ३०-१३, १४

शलेष्मला पिच्छिला योनिः कण्डुयुक्ताऽतिशीतला ॥ सु. ३०

स्था० ३८-१७

कफोऽभिष्यन्दिभिः कुद्धः कुर्याद्योनिमवेदनाम् ।

शीतलां कण्डुलां पाण्डुपिच्छलां तद्विधसुतिम् ॥ सा व्यापत्
श्लैष्मिकिः--

--अ०ह०उ० स्था० ३३-४४

-अ०सं० उ० स्था ३८-४६

Kaphaj Yonivyapat is regarded as one among the 20 Yonivyapat and is characterized by unctuous, cold itching and mild pain in vagina. White unctuous discharge from vagina.

दिवास्वप्नाव्यायामालस्यमधुराम्ललवणशीतस्निग्धगुरुपि
च्छ्लामिष्यंदिहायनक यबकनैषधैत्कटमाषमहामाषगोधूम -
तिल - पिष्ट - विकृतिदधिदुग्धकृशरापायसेक्षु -

विकारानूपौदकमांसवसाबिसमृणालकशेरुकश्रुङ्गाटकमधुर -
बल्ली- फलसमशनाध्यशन प्रभृतिभिः श्लेष्मा प्रकोपमपद्यते
॥-- सु० सू० २१-२३

Kapha Prakopa take place due to a) seasonal changes B) Dietetic factor like excess carbohydrate, fats and salt. C) Factor responsible for obesity like lack of exercise, sleeping during day time (Divaswapa)

Kapha Prakopa always accompanied with eighter disorder of Vata or Pitta. naturally symptom and sign of Kapha Prakopa will be different according to Dosha Pradhanya influencing Dosha.

Charak	Sushrut	Vagbhat	Madhav nidan, bhavprakash, yogratnakar
Mithyachar (abnormal diet and mode of life) Pradusta-Artava (abnormalities of Artava) Bijadosha (abnormalities of Bija) Daivakopa (curses or anger of god)	Mithyachar Pradusta- Artava Bijadosha Daivakopa Prabridha linga Purush Atisevana	Dustabhojan Bisamangasayan Bhriśa Maithun sevan Dusta Artava Apadravya Prayog Bijadosha Daivata	Followed charak

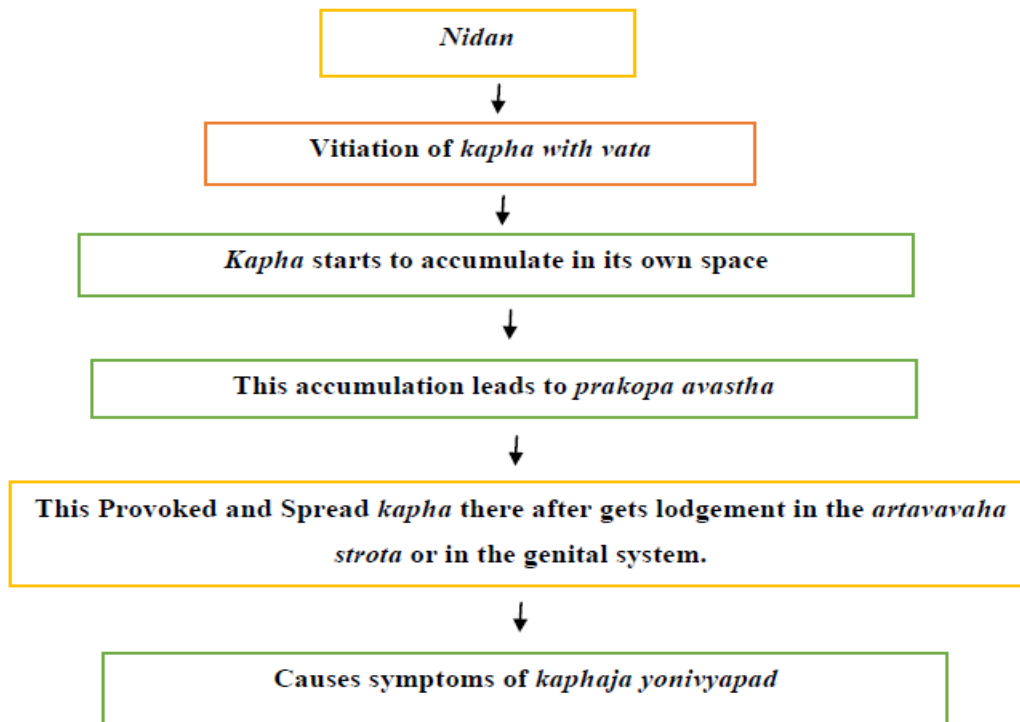
These are the general Nidan of Yonivyapat. If we observe the Nidan of Kaphaja Yonivyapat then it is cleared that in classics Nidan for Kaphaja Yonivyapat is not mentioned directly.

Qualities of kapha^[11]

- Guru
- Madhur
- Sthira
- Mridu
- Picchila
- Snigdha
- Shita

So, the qualities agonist to these can vitiate Kapha

Samprapti



Sanchaya -Nidana like undue straining during
Prakopa -Vitiation of *Apana Vayu* in *Garbhashaya*
Prasara -Circulation of *Apana Vayu* in *Kati* and *Udara* region

Stana samsraya

Vata localised in *garbhasaya* and disturb the *Kapha Yonisrava, Katisula, Bheda, Artavadusti*

Samprapti ghatak

- *Dosha* – *Vata + kapha*
- *Dushya* – *Rasa, Rakta & Mamsa*
- *Strotas* – *Rasavaha, Artavaha, Raktavaha*
- *Strotodustilakshan* – *Atipravriti*
- *Adhistan* – *Yoni*
- *Rogamarga* – *Abhyantara*
- *Sthanasamsraya* – *Yonimarga & Garbhashaya*

Other 4 types of kaphaja yonivyapad

	<i>Atyananda</i>	<i>Aticharana</i>	<i>Acharana</i>	<i>Karnini</i>
<i>Sushrut</i> ^[12]	woman suffers from this disease does not satisfy with coitus.	It is caused by excessive sexual act. Woman does not achieve conception.	Woman gets excited before coitus as well as much earlier than her husband	<i>Kapha</i> and <i>Rakta</i> produces <i>Karnika</i> in <i>Yoni</i>
<i>Charaka</i> ^[13]	Not mentioned	<i>Sopha</i> (inflammation), <i>Supti</i> (numbness) & pain occur.	Non cleanliness of vagina produces <i>Krimi</i> which produces itching in <i>Yoni</i> and due to this Woman feels excessive sexual desire	Due to straining before starting of labour pain, <i>Vayu</i> is obstructed by foetus, along with <i>Kapha</i> and <i>Rakta</i> produces <i>Karnika</i> in <i>Yoni</i> .
<i>Vagbhata</i> ^[14]	Followed Charaka	Followed Charaka	Followed Charaka	Followed Charaka
<i>Madhav nidan</i> ^[18]	Followed Sushruta	Followed Sushruta	Followed Sushruta	Followed Sushruta
<i>B.P. & Y.R</i> ^[15]	Followed Sushruta	Followed Sushruta	Followed Sushruta	Followed Sushruta

Types of kaphaja yonivyapad by different acharyas

<i>Charaka</i>	<i>Sushruta</i>	<i>Vagbhata</i>
<i>Kaphaj</i>	<i>Sleshmaja</i>	<i>Kaphaj</i> <i>Atyananda</i> <i>Aticharana</i>

		Acharana Karnini
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Purvarupa

No specific *Purvarupa* of *Kaphaja Yonivyapat* is explained in the treatises. the vague manifestation of

Rupa in the initial stages should be considered as *Purvarupa* of *Yonivyapat*.

Rupa kaphaj yoni vyapat

	Charak	Sushrut	Vagbhat	Madhavnidan	Bhavprakash
Yoni picchilata	+	+	+	+	+
Shitalata	+	+	+	+	+
Kandu	+	+	+	+	+
Alpavedana Yoni	+	-	-	-	-
Avedana Yoni	+	-	+	-	-
Pandu varna strava	+	-	+	+	+

Upadrava^[16]

The *Upadrava* of *Yonivyapat* in general is also the *Upadrava* of *Kaphaja Yonivyapat* as specific *Upadrava* is not mentioned in treatises. *Upadrava* include – Infertility, *Arsha*, *Pradara*, *Vataja roga*.

Differential diagnosis**Sannipatika yonivyapat**

It is *kapha pradhanya*; white mucoid discharge is prominent symptoms.

Upapluta yonivyapat

According to *Charaka* the condition found only in pregnant women, but the *vagbhata* describes that it may occur in any woman. There is prominence of *Vata* and *Kapha* giving rise to white mucoid discharge per vagina.

Atyananda Yonivyapat /Vipluta

Main symptom is excessive urge of intercourse, otherwise called as nymphomania. Prominence of *Vata* *Kapha* giving rise to white mucoid discharge with severe itching. Also due to unhygienic condition.

Acharana yonivyapat

Acharana Yonivyapat describe by, *Sushruta*, *Madhavnidan*, *Bhavprakash*, *Yogratnakar* Acc.to *Acharya Charaka* symptom like 1) secretion per vagina to earlier during coitus 2) lady incapable of conceive became sterile.

Kaphaja yonivyapat chikitsa sidhant^[17]

- 1) Eradication of cause
- 2) *Kaphaghna* medication
- 3) *Varti- vaginal tablet*
- 4) *Katu Kashay Rasatmaka drug for douching*
- 5) Medicated fumigation
- 6) *Kshara -Karma*
- 7) *Agni Karm*
- 8) *Pathya Apathya for Kaphaja Yonivyapada -*
- 9) *Taila, Sidhu, Pathyarishta (Abhayarishta), Yavanna* are *Pathya* mentioned for *Kaphaja Yonivyapada*.”

Mand” is contraindicated by women suffering from *Yonirogasa*.

Upashaya – Anupashaya

Upashaya in *Kaphaja Yonivyapada* depends upon:

Aahar - (*Diet*)

Vihar - (*Daily expenditure*)

Chikitsa – (*Treatment*)

Aahara – It should be *Kaphadi Dosha Shamaka* like *Ruksha*, *Ushna*, *Tikshna*, *Katu*, *Tikta*, *Kashaya* and nutritional to *Garbhashaya* and *Yoni*.

Vihara - *Divaswapa*, *Vyavay* or *Ativyayama* and *Vegdharana* should be avoided.

- **Chikitsa**

Kaphadi Dosha Shamaka Chikitsa like *Ushna*, *Ruksha*, *Tikshna*, *Katu*, *Tikta*, *Kashaya Gunatmaka* drugs should be used in *Chikitsa*.

Candidiasis^[18]

Candida species are among the most common human fungal pathogens and are responsible for both superficial (mucosal and cutaneous) and systemic infection approximately 8% of nosocomial bloodstream infections are caused by *Candida* species

The five species most commonly associated with candidiasis are *Candida albicans* (65.3%), *Candida glabrata* (11.3%), *Candida tropicalis* (7.2%), *C. parapsilosis* (6.0%), and *Candida krusei* (2.4%)

Type of candida species^[19]

Candida species are the most common causes of fungal infection. Approximately 90% of infections are caused by five species: *Candida albicans*, *Candida glabrata*, *Candida tropicalis*, *Candida parapsilosis*, and *Candida krusei*. Three (*C. albicans*, *C. tropicalis*, and *C. parapsilosis*) belong to the CTG clade, in which the CTG codon is translated as serine and not leucine. *C. albicans* remains the most commonly isolated but is decreasing relative to the other species.

Candida albicans^[20]

Candida Albicans can cause two major types of infections in humans: superficial infections, such as oral or vaginal candidiasis, and life-threatening systemic infections albicans infections. Predisposing factors for VVC are less well defined than for oral contraceptive pills and include diabetes mellitus, use of antibiotics, oral contraception, pregnancy and hormone therapy. Despite their frequency and associated morbidity, superficial C. albicans infections are non-lethal. In stark contrast, systemic candidiasis is associated with a high crude mortality rate, even with first line antifungal therapy.

Causes of candida albicans^[21]

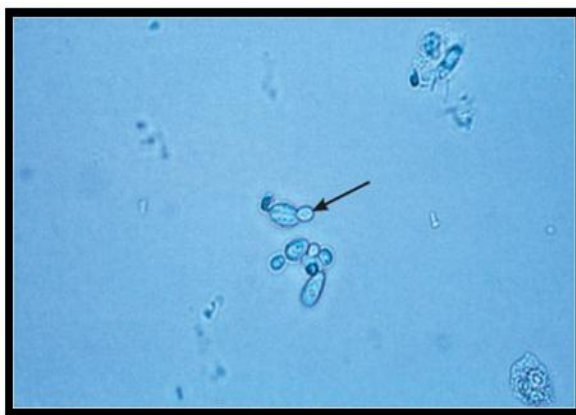
1. Physiological causes:
2. Other Candida species found in healthy individuals include Candida glabrata, Candida tropicalis, Candida parapsilosis, and Candida krusei although the relative prevalence of the species depends on the

geographical location, subject population, and clinical settings.

3. Hormonal
4. Infections/ pathological as acquired lesion results from hyperplasia of epithelium.
5. Environmental
6. Certain diet habit

Pathology^[22]

Candida albicans is usually transmitted from mother to infant through childbirth, and remains as part of a normal human's microflora. The overgrowth of C. albicans leads to symptoms of disease, and it occurs when there are imbalances – for example, changes in the normal acidity of the vagina. C. albicans infections very rarely spread through sexual intercourse. The typical reservoir for C. albicans is in the normal human microflora, and is not found in animal vectors.

**Clinical features**^[23]

There are 3 major types of infections caused by Candida albicans: oropharyngeal candidiasis, vulvovaginal (genital) candidiasis, and invasive candidiasis (Candidemia).

Oropharyngeal candidiasis

Oropharyngeal candidiasis is an infection in the mouth and throat area. Usually, it is characterized by the formation of white patches on top of the tongue and throughout the mouth, which is also known as “Thrush”. Thrush can be removed with a blade or a cotton-tipped swab, but the underlying tissue will be irritable and show a distinct redness. This infected area will cause soreness and difficulty during eating.

Vulvovaginal (Genital) candidiasis

Vulvovaginal candidiasis is the infection of the genital region, typically the vaginal walls, in women. The vaginal yeast infection causes itchiness and a burning-sensation in the vagina and surrounding tissues. Also, a white discharge – described with an appearance similar to white cottage cheese – is typically present.

Genital candidiasis is much more prevalent in women, but men can also contract it. Although it is not considered an STD, men are usually infected after sex with a woman having a vaginal yeast infection. Symptoms involved rash, irritation on the head and surrounding skin of the penis.

Invasive candidiasis (Candidemia)

Invasive candidiasis (or candidemia) is the infection of C. albicans into the bloodstream. This leads to its invasion of organs throughout the body, such as the kidney, liver, brain, and many more. Subjects began to suffer from fevers, chills, fatigue, muscles aches, and abdominal pains. Typically, subjects with compromised immune systems are only at risk, while healthy people are susceptible to oral/genital candidiasis. Compromised immune systems can be caused by chemotherapy, transplantation, broad spectrum antibiotics, and much more.

Vulvo-vaginal candidiasis^[24]

Candidiasis in the vagina is commonly called a “Vaginal yeast infection.” other names for this infection are “Vaginal candidiasis,” “vulvovaginal candidiasis,” or “Candidal vaginitis.” A vaginal yeast infection is a

fungal infection that causes irritation, discharge and intense itchiness of the vagina and the vulva — the tissues at the vaginal opening.

Symptoms

The symptoms of vaginal candidiasis include-

- Itching and irritation in the vagina and vulva.
- A burning sensation, especially during intercourse or while urinating.
- Redness and swelling of the vulva.
- Vaginal pain and soreness.
- Vaginal rash.
- Thick, white, odor-free vaginal discharge with a cottage cheese appearance.
- Watery vaginal discharge.

Although most vaginal candidiasis is mild, some women can develop severe infections involving redness, swelling, and cracks in the wall of the vagina

Cause

The fungus candida albicans is responsible for most vaginal yeast infections. vagina naturally contains a balanced mix of yeast, including candida, and bacteria. Certain bacteria (lactobacillus) act to prevent an overgrowth of yeast.

But that balance can be disrupted. An overgrowth of candida or penetration of the fungus into deeper vaginal cell layers causes the signs and symptoms of a yeast infection

Women who are more likely to get vaginal candidiasis include those who:

- Are pregnant
- Use hormonal contraceptives (For example, birth control pills)
- Have diabetes
- Have a weakened immune system (for example, due to HIV infection or medicines that weaken the immune system, such as steroids and chemotherapy)
- Are taking or have recently taken antibiotics

Factors that increase your risk of developing a yeast infection include:

- **Antibiotic use:** Yeast infections are common in women who take antibiotics. Broad-spectrum antibiotics, which kill a range of bacteria, also kill healthy bacteria in your vagina, leading to overgrowth of yeast.
- **Increased oestrogen levels:** Yeast infections are more common in women with higher oestrogen levels — such as pregnant women or women taking high-dose oestrogen birth control pills or oestrogen hormone therapy.
- **Uncontrolled diabetes:** Women with poorly controlled blood sugar are at greater risk of yeast infections than women with well-controlled blood sugar.

- **Impaired immune system:** Women with lowered immunity — such as from corticosteroid therapy or HIV infection — are more likely to get yeast infections.

Prevention

To reduce your risk of vaginal yeast infections, wear underwear that has a cotton crotch and doesn't fit too tightly.

Is might also help to avoid:

- Tight-fitting pantyhose.
- Douching, which removes some of the normal bacteria in the vagina that protect you from infection.
- Scented feminine products, including bubble bath, pads and tampons.
- Hot tubs and very hot baths.
- Unnecessary antibiotic use, such as for colds or other viral infections.
- Staying in wet clothes, such as swimsuits and workout attire, for long periods of time.

Complicated vulvovaginal candidiasis

Is defined as recurrent (four or more episodes in one year) or severe infections, or infections that occur in a subject who is immunocompromised, such as someone with AIDS or poorly controlled diabetes mellitus. Culture is particularly important for the diagnosis and treatment of complicated vulvovaginal candidiasis, because subjects are more likely to have an infection with nonalbicans strains of *Candida*, which may require different treatment

Investigations

- A KOH treated wet mount of the vaginal discharge helps to dissolve all cellular debris, leaving behind the resistant hyphae and spores of candida.
- Culture: Vaginal discharge can be cultured on Sabouraud's agar Presence of discrete creamy rounded colonies appear in 48-72 hrs, giving a typical yeast-like odor.
- Nickerson's medium is a special medium, on which candida colonies appear in 48-72 hrs as brown-black discrete round colonies.
- Pap smear-A procedure in which they can be checked under a microscope for cervical cancer or cell changes that may lead to cervical cancer. A Pap smear may also help find other conditions, such as infections or inflammation.

Differential diagnosis^[25]

Candida infection often complicates all irritated vulvar eruptions (lichen sclerosus, lichen simplex chronicus, etc). Candidiasis can cause cyclic vulvovaginitis, which occurs at the same time each month around the menses with minimal discharge. Pre-menarche girls are a common group to have lichen sclerosus.

Treatment in modern^[26]

Therapy approach should be individual, including local and oral antimycotics until the symptoms disappear (6-14 days), then continuous or intermittent maintenance therapy is administered – ketoconazole at a daily dose of 100 mg for up to 6 months, or a monthly dose of fluconazole, tioconazole weekly treatment for 6 weeks, or boric acid suppositories at a dose of 600 mg for 2 weeks.

An optimal protocol therapy in treatment of RVC has not been established yet, so individual approach is required based on efficacy comparison, positive response and potential effect, analysis of previous treatments and cost effectiveness.

Apart from reducing these factors to the minimum, a prolonged protective treatment is recommended, based on empirical treatment indicated by reported symptoms, or a six-month protective administration of local antimycotics (treatment with a single 500mg clotrimazole applied monthly) or systemic ones (150mg fluconazole once a month after periods). Systemic administration is more efficient.

DISCUSSION***Kaphaj yonivyapat* and *Candida albicans***

It is difficult to say what *Candida Albicans* is in terms of *Ayurveda*. There is no disease in *Ayurveda*, which can be exactly correlated with candidiasis. Many researchers have tried to attribute erosion with one or other type of *Yoniroga*. All the included candida albicans under *Yoni Roga*. Here, *Kaphaj Yoni vyapat* sign and symptoms are correlated with candida albicans because the the description and characteristic features of the disease have coincided with the description of *Candida Albicans* more than any other type of *Yoniroga*. In *Candida Albicans* have P/v thick curdy white discharge, itching at vulva, smell and sometimes itching when associated with then it appears like *Kaphaj Yonivyapat*.

The following points show the similarity between *Kaphaj Yonivyapat* and candida albicans.

- The causative factor of both the conditions are specific to female reproductive age.
- Both the conditions are very specific to female genital tract.
- Both the conditions characteristically occur in uterine cervix.
- Both conditions are associated with symptoms like vaginal discharge and itching. Similar are characteristics of *Kaphaj Yonivyapat*.

CONCLUSION

It is difficult to say what *Candida Albicans* is in terms of *Ayurveda*. There is no disease in *Ayurveda*, which can be exactly correlated with candidiasis. Many researchers have tried to attribute erosion with one or other type of *Yoniroga*. All the included candida albicans under *Yoni*

Roga. Here, *Kaphaj Yoni vyapat* sign and symptoms are correlated with candida albicans.

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