# Candidiasis

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| **DEFINITION** | Infection of the genitals caused by candida species, usually C. albicans but can involve other candida species. Candida can be normal flora of the skin, mouth and vagina. It is not considered an STI, but sex partners can exchange oral-genital strains of candida. |
| **SUBJECTIVE** | May include:<br>1. Vaginal discharge with or without vulvar and/or vaginal pruritis, burning ,soreness or odor<br>2. History of recent use of antibiotics, oral contraceptives, or other drugs<br>3. Dyspareunia<br>4. Genital, penile or vaginal irritation or excoriation<br>5. External dysuria<br>6. Sore, painful or burning of the mouth and tongue, dysphagia or thick, white patches on the oral mucosa.<br>7. History of diabetes mellitus, HIV, immunocompromising diseases or long-term use of antibiotics or corticosteroids |
| **OBJECTIVE** | May include:<br>1. Erythematous, swollen labia +/- excoriations<br>2. Tender, erythematous vaginal walls<br>3. Semi-adherent, curdy, white discharge present on vaginal walls, cervix and/or vulva<br>4. Genital itching, burning or rash<br>5. Diffuse erythema and white patches that appear on the surface of buccal mucosa, throat, tongue and gums. |
| **LABORATORY** | May include:<br>1. Wet mount<br>2. Vaginal pH 4.0-4.5 (pH > 4.5 generally excludes yeast) ~~4.0 - 5.0~~<br>3. Negative KOH "Whiff" test<br>4. Nickerson culture<br>5. Vaginal culture<br>6. Blood sugar and/or urine dipstick<br>7. STD or HIV testing if clinically indicated |
| **ASSESSMENT** | Candidiasis |
| **PLAN** | 1. Recommended Over the counter Regimens for uncomplicated vulvovaginal candidiasis:<br>a. Clotrimazole 1% cream 5 gm intravaginally for 7-14 days OR<br>b. Clotrimazole 2% cream 5 gm intravaginally for 3 days OR<br>c. Miconazole 2% cream 5 gm intravaginally for 7 days OR<br>d. Miconazole 4% cream 5 gm intravaginally for 3 days OR<br>e. Miconazole 100 mg vaginal suppository, one suppository for 7 days OR<br>f. Miconazole 200 mg vaginal suppository, one suppository for 3 days OR<br>g. Miconazole 1,200 mg vaginal suppository, one suppository for 1 day OR<br>h. Tioconazole 6.5% ointment 5 gm intravaginally in a single application (OTC).<br>2. Recommended Regimens for Prescription Intravaginal Agents:<br>a. Terconazole 0.4% cream 5 g intravaginally for 7 days OR<br>b. Terconazole 0.8% cream 5 g intravaginally for 3 days OR<br>c. Terconazole 80 mg vaginal suppository, one suppository for 3 days.<br>d. Butoconcazole 2% cream (single dose bio adhesive product) 5 g intravaginally in a single application<br>3. Recommended Oral Agents (Prescription only):<br>Fluconazole 150 mg tablet PO, one tablet in a single dose OR |

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| | b. Fluconazole 150 mg tablet PO, # 2 tablets, 1 dose stat and may repeat in 72 hours if needed.<br>4. Recurrent vulvovaginal candidiasis: Defined as 3 or more episodes each year. Each individual episode responds well to short duration of oral or topical azole therapy. However, to maintain clinical and mycologic control – recommend a longer duration of initial therapy before initiating maintenance regimens such as:<br>a. 7 – 14 days of any topical therapy, OR<br>b. Fluconazole 100mg, 150 mg or 200 mg PO dose every third day for a total of 3 doses, OR<br>c. follow with Maintenance Regimen of Fluconazole 100 mg, 150 mg or 200mg PO weekly for six months with topical treatments used intermittently.<br>d. Evaluate immune status.<br>5. Severe vulvovaginitis: defined as extensive vulvar erythema, edema, excoriation, and fissure function.<br>a. Responds better to longer therapy: 7-14 days of topical azole therapy **OR** Fluconazole 150 mg in 2 sequential doses, second dose 72 hours after initial dose.<br>b. Adjunctive treatment with a weak topical steroid, such as 1% hydrocortisone cream, may be helpful in relieving some the external symptoms.<br>6. Compromised Host: defined as women with underlying immunodeficiency, such as uncontrolled diabetes, other immunocompromising conditions (HIV) or those receiving immunosuppression therapy (corticosteroid treatment): . OK to leave a. and b. here<br>a. Respond better to more prolonged conventional therapy (e.g.,7-14 days) of conventional treatment<br>b. Efforts to correct modifiable conditions should be made.<br>7. Pregnancy: Only topical azole therapies applied for 7 days as outlined above are recommended.<br>8. HIV infection: Treatment should not differ from that of HIV negative men and women.<br>9. For women with a history of diagnosed yeast and currently complaining of symptoms via phone the provider may:<br>a. Advise purchase of OTC products.<br>b. Offer fluconazole or other prescription topical azole therapy.<br>c. Advise infection check if continued symptoms after treatment.<br>10. For women experiencing three or more yeast infections a year, some evidence suggests oral or intravaginal probiotics may help prevent candida overgrowth.<br>12. Nonalbicans candida vulvar vaginal optimal treatment is unknown. Options include:<br>a. Longer duration of therapy (7-14 days) with a nonfluconazole azole regimen (oral or topical) OR<br>b. Boric acid 600mg in a gelatin capsule intravaginally daily for 2 weeks<br>11. Male patients can use any of the above-mentioned topical creams for genital symptoms.<br>14 Treatment for oral candidiasis include:<br>a. Nystatin mouthwash: 400,000 to 600,000 IU oral suspension qid for at least 48 hours after symptoms resolve. Swish in mouth as long as able, then swallow OR<br>b. Clotrimazole (lozenges) 10 mg PO : dissolve slowly in mouth 5 times a day for at least 14 days OR<br>c. Fluconazole: 100-200 mg orally daily for 7-14 days<br>d. Miconazole 50 mg Buccal tablet: apply to gum region Q day for 14 days. |
| **CLIENT EDUCATION** | 1. Provide education handout, review symptoms, treatment options, and vaginal health principles. |

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| | 2. Advise to avoid intercourse during treatment (vaginal therapies may weaken latex condoms).<br>3. Stress the importance of not interrupting treatment during menses and not to use tampons during treatment with vaginal therapies.<br>4. Counsel on importance of perineal hygiene.<br>5. Advise partner to self-treat if symptomatic.<br>6. Recommend client RTC if symptoms persist or recur within 2 months of onset of initial symptoms. |
| **CONSULT/ REFER TO PHYSICIAN** | 1. Persistent or recurrent infection unresponsive to treatments applied<br>2. Extreme excoriation |

**References:**

1. https://www.cdc.gov/std/treatment-guidelines/STI-Guidelines-2021.pdf
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3. Candidiasis Treatment & Management: Medical Care, Surgical Care, Consultations (medscape.com)
4. Hamiltone, RJ. Tarascon Pocket Pharmacopia. 34th Edition, Jones & Bartlett Learning, Burlington MA., 2020, pp 32.