

## CANDIDIASIS (WOMEN)

Note:

- Routine candida sensitivity testing has been discontinued, however, speciation on Sabouraud plate is still of clinical value in recurrent cases.

### Single Episode

#### Clinical Features

Vulval itch, soreness, vaginal discharge, superficial dyspareunia, external dysuria

#### Signs

Erythema, oedema, discharge (typically curd like and non-offensive), fissures, satellite lesions

#### Diagnosis

Women with abnormal vaginal discharge do NOT normally need a charcoal swab or microscopy. If this is the first presentation, a diagnosis can be made on pH and clinical examination

- pH 4 – 4.5
- Consider full sexual health testing after a risk assessment

#### Management

[NB: None in asymptomatic patients – 10-20% women of reproductive age have candida present in absence of symptoms].

Topical and oral agents give 80-90% cure rate in uncomplicated vulvo-vaginal candidiasis in non-pregnant women. Pregnant women may need longer courses as single dose treatment is less effective. Oral therapy in pregnancy is contraindicated.

**Fluconazole 150mg stat (cheapest)**  
(avoid in pregnancy and breast feeding)  
or  
**Clotrimazole 500mg pessary**  
(Effect of local preparations on condoms unknown)

#### **Alternatives:**

- Clotrimazole -5g 10% vaginal cream stat (effect on condoms unknown)
- Econazole pessary 150 mg stat (damages condoms)
- Add topical 1% clotrimazole and 1% hydrocortisone cream if severe inflammatory component

**Advice:** Local skin care -soap substitutes, avoid local irritants/perfume products and tight synthetic clothing as simple self-help measures. Send SMS to client with genital skin care information leaflet: [www.sandyford.scot/genital-skin-care/](http://www.sandyford.scot/genital-skin-care/)

Follow-Up

- Not necessary, unless ongoing symptoms.
- If severe review at 3 to 5 days and consider repeat treatment

Partner notification

- Not necessary. No evidence of benefit in treating partners unless they have symptoms of candida themselves

**Relapsing or Recurrent Candidiasis**

**Four or more episodes** of symptomatic vaginal candidiasis in 12 months with Lab confirmation on at least two occasions

Prevalence

<5% healthy women of reproductive age with a primary episode will develop recurrent disease. Women labelled with recurrent VVC may have dual pathology with another condition such as vulval eczema or vulvodynia or sometimes the candida is actually commensal and not the cause of their symptoms. It is worthwhile thinking about and appropriately managing co-existing or alternative vulvovaginal conditions in women presenting with 'recurrent thrush'.

Management

1. Confirm diagnosis. Ask for speciation of *Candida* sp, discuss appropriate tests with the local lab e.g. use the Sabouraud agar plates if available in clinic. If this is not available then perform an HVS and let the lab know that you want speciation.
2. Exclude predisposing causes (pregnancy, HIV and other causes of immunosuppression, antibiotics, diabetes, corticosteroid or HRT use)
3. Local skin care (soap substitutes, avoid local irritants/perfume products and tight synthetic clothing as simple self-help measures).
4. If the client has cyclical symptoms, cyclical therapy may be of benefit.
5. Suppressive therapy. Type of preparation and timing of treatment will vary with patient. Regimens are empirical and not based on randomised controlled trials. Principle involves induction (eradication of candida) then maintenance therapy for 6 months.

Discuss with a senior doctor before starting therapy. Examples of Induction and Maintenance Therapies are shown in the Table Below:

DRUG	INDUCTION DOSE	MAINTENANCE DOSE
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Fluconazole Capsule	150mgs on days 1,4 and 7	150 mg once per week for 6 months
Clotrimazole Pessary	500mg stat daily to a maximum of 14 days	500mg once per week for 6 months

6. The subsequent regimen should be titrated to the patient's clinical and mycological response.

**\*QT Prolongation:** Certain medications including fluconazole, macrolide and quinolone antibiotics cause QT prolongation and should not be prescribed with interacting medications. This is unlikely to be of clinical significance for stat doses but is important for longer courses. Please use BNF Interaction Checker (access via link on NaSH homepage) to ensure these medications are safe to prescribe for your patient and discuss with a senior colleague if necessary.

## Management of Vulvovaginal Non-Albicans Candida Infection in Adults

### Introduction

80-89% of single episodes of Candida are caused by *Candida albicans*. Other *Candida* species or yeasts such as *C. glabrata*, *C. tropicalis*, *C. krusei*, *C. parapsilosis*, and *Saccharomyces cerevisiae* are involved in the remainder.

### Investigations

All women who present with persistent candida symptoms despite first line treatment of fluconazole and/or clotrimazole, should have microscopy investigations and candida growth confirmed on culture and speciation, to investigate for a non-albicans species of candida.

In Sandyford Central, this should be done by sampling from the lateral vaginal walls and placing on a Sabouraud's medium. In hubs, a high vaginal swab (HVS) in charcoal medium should be sent to microbiology. Please document on the form that you suspect 'recurrent candida infection' and request 'candida speciation'.

The lab will not give antifungal sensitivities.

### Management

The most common non-albicans species of candida is *Candida glabrata*<sup>1</sup> which is usually susceptible to azoles, however some non-albicans species such as *Candida krusei* are intrinsically resistant to fluconazole. In general, non-albicans candida infection requires a longer duration of treatment but comparative evidence for different treatment options and duration of treatment at present is limited.

If a non-albicans species is identified on fungal culture, the woman should be assessed in a consultant led GUM clinic.

If the woman is asymptomatic by the time of review, she will not necessarily require further treatment – this should be explored on an individual basis.

If a prolonged course (minimum of 2 weeks) of oral fluconazole\* (150mg every 3 days) or intravaginal clotrimazole (500mg pessary every 3 days) has not been trialled previously, this may be of benefit in *C. glabrata*. This may also be of benefit to provide symptomatic relief whilst waiting for other curative medications (see below).

Consider itraconazole\* 200mg BD for 1 day or if symptoms are recurrent 50 – 100mg daily for 6 months.

\*Avoid in pregnancy, breastfeeding or trying to conceive.

*A careful drug history should be taken as there are significant interactions associated with fluconazole and itraconazole. Fluconazole can prolong QT interval, so avoid co-administration with other medications which also prolong QT*

*interval. The prolonged use of Itraconazole requires monthly LFT monitoring and should be avoided if risk heart failure. Itraconazole capsule absorption may be reduced if the gastric acidity is reduced therefore should be taken following a meal or with a glass of coke.*

The following drugs can be obtained under consultant supervision and liaison with pharmacy:

First line treatment

- Nystatin pessaries (100,000 units in 4g) 1-2/night for 14 nights

Second line treatment

- Nystatin vaginal cream 5g nightly x 14 nights (70g tube) using vaginal applicator
- Amphotericin 100mg + Flucytosine 1g in vaginal gel (applicator nightly x 14 nights) \*\*allow at least one week for preparation

### **Symptomatic relief**

Vulval emollients may give benefit as a soap substitute and moisturiser as a vulval dermatitis may be present. An antihistamine (cetirizine 10mg daily) may provide benefit. If contraceptive options allow, a switch to a progesterone only method should be considered. Avoid tight fitting clothing and any irritants to skin eg. Perfumed products, wipes etc

### **Review**

Appropriate follow up should be arranged.

An appointment 2 weeks after treatment is complete (4 weeks from receiving treatment) for review of symptoms and to obtain a sample to ensure cure is advised.

## **CANDIDIASIS (MEN)**

### **Diagnosis**

- Often over-diagnosed. Diagnosis should only be made if yeasts on microscopy or culture.
- Consider other causes of balanitis. Take a careful dermatological history. Ask about any personal or family history of atopy. Consider topical irritant dermatitis eg. use of Savlon cream, other OTC products, excessive salt
- Men frequently present with transient glans erythema occurring a day or so after sex with a female partner with vaginal candida (which may be asymptomatic)

### **Investigations**

- Subprepuccial swabs for Gram-stain (if available) and culture
- Consider full sexual health testing after a risk assessment
- Check urine for glucose.

### **Management**

- Saline washes if exudative/broken skin
- Otherwise aqueous cream as soap substitute
- Consider Clotrimazole (1%) cream bd ONLY if yeasts on Gram stain or on subsequent culture or clinically indicated

### **Follow-Up**

Only if fails to resolve

## **Appendix for Sandyford Staff**

### **Sandyford Local Protocol for Clotrimazole**

Sandyford nursing staff can supply one Clotrimazole pessary 500mg and/or Clotrimazole cream 1% for symptoms suggestive of uncomplicated vaginal candidiasis when first line treatment with Fluconazole is not indicated

Exclusion criteria:

- Complicated vaginal candidiasis
- Symptoms of odorous discharge
- Previous treatment – more than four treatments in past twelve months for this condition
- Known sensitivity to clotrimazole

Please record on Nash as supplied and administered without using the PGD drop down box.

Flucytosine/amphotericin vaginal cream is an unlicensed product with a short shelf-life and high cost. Discuss all orders with Sandyford pharmacist for review and ordering – must be ordered in packs of 14 tubes.

## **References**

1. Bashhguidelines.org. (2019). *BASHH Guidelines* [online] Available at: <https://www.bashhguidelines.org/media/1223/vvc-2019.pdf> [Accessed June 2023]