Australian STI Management Guidelines for Use in Primary Care

Candidiasis

Overview

- *Candida* species can be normal flora and therefore not need treatment if asymptomatic.
- Can be sexually transmitted but is not considered a sexually transmitted infection (STI).
- Can arise spontaneously or secondary to disturbance of vaginal flora e.g. antibiotic therapy or increased oestrogen levels e.g. pregnancy, postmenopausal oestrogen therapy.

Cause

- Majority *Candida albicans*, rarely other *Candida* species.

Clinical presentation

Symptoms	
Penile	**Vulvar/vaginal**
• Red rash on genitals, especially under foreskin, may or may not be itchy • Swelling of foreskin if severe • Fissures • Superficial erosions	• Thick, white, clumping vaginal discharge although discharge can appear normal or be absent • Genital/vulvar itch, burning, soreness • Superficial dyspareunia • External dysuria • Excoriation, erythema, fissures, swelling

Special considerations

Recurrent candidiasis is defined as 4 or more episodes in a 12-month period and may occur in nearly 10% of women. It should be confirmed by culture on at least one occasion.

Other causes for symptoms must be excluded by genital examination e.g. dermatitis, lichen sclerosis, herpes simplex viruses (HSVs).

Consider diabetes mellitus, human immunodeficiency virus (HIV) infection or other causes of immunosuppression if poorly controlled disease.

Diagnosis

Usually diagnosed on basis of symptoms and signs. The following tests may be useful in recurrent disease.

Site/Specimen	Test	Consideration
High vaginal swab or self-collected vaginal swab	Microscopy and culture (MCS)	Culture for yeast enables species differentiation and sensitivities and differentiation from bacterial vaginosis or trichomoniasis
Penis	Microscopy and culture (MCS)	Culture for yeast

Specimen collection guidance

Clinician collected | Self-collection

Investigations

- Recurrent candidiasis should be confirmed with vaginal swab for microscopy and culture with speciation
- Consider non-*albicans* species in cases of confirmed recurrent candidiasis
- Consider PCR testing for herpes only if there are suggestive clinical signs and symptoms.

See STI Atlas for images.

Management

Principal treatment option		
Situation	Recommended	Alternative

Uncomplicated	Vaginal azole creams (e.g. clotrimazole 10% vaginal cream, 1 applicator intravaginally at night, as stat. dose or 3-7 day course) or 500 mg clotrimazole vaginal pessary stat. For balanitis, treat with Clotrimazole 1% twice daily until symptoms settle then for a further week.	Fluconazole 150 mg PO, stat.
Recurrent *Candida albicans*	Treat each episode with longer course of azole cream (rather than stat. dose) and/or induction with fluconazole 150 mg PO, for 3 doses, 3 days apart, followed by maintenance with fluconazole 150 mg PO, weekly for 6 months	Clotrimazole 10% vaginal cream (I applicator) nightly for 10-14 days then 500mg vaginal pessary weekly after induction.
Candida glabrata	Boric acid 600 mg vaginal pessaries (from a compounding pharmacy), one nocte for 14 days (boric acid can be fatal if ingested, avoid in pregnancy)	100 000 IU nystatin inserted per vaginally for 14 days

nocte: every night

PO: orally

stat.: immediately

Treatment advice

- Intravaginal and oral azoles have similar efficacy – topical therapy provides quicker symptom relief but women generally prefer oral therapy.
- Vulvar treatment alone is inadequate due to a vaginal reservoir – both sites should be treated.
- The addition of hydrocortisone 1% cream may provide symptomatic relief.
- No evidence that specific diets or use of probiotics influence recurrence.
- Reconsider diagnosis if no response to therapy.
- Oral azoles cannot be used in pregnancy.
- No hepatic monitoring is required for fluconazole use at the above doses.

Other immediate management

- Avoid local irritants e.g. soap, bath oil, body wash, bubble bath, spermicide, vaginal lubricant and vaginal hygiene products.

- Latex barrier contraception e.g. condoms can be damaged by antifungal vaginal creams or oil-based products.
- Post-coital penile hypersensitivity to vaginal *Candida* colonisation is possible and responds to partner treatment Hydrocortisone 1% cream may provide symptomatic relief. Partners do not usually require treatment.

Special Treatment Situations

Special considerations

- More severe disease and symptoms may need longer courses of oral or topical treatment.
- Consider seeking specialist advice before treating complicated presentations or recurrent disease that is not responding to therapy.

Situation	Recommended
Pregnant people	May need longer course of topical treatment (e.g. 7 days minimum). Fluconazole/boric acid contraindicated.
Allergy to principal treatment choice	Try alternative treatment

Contact Tracing

Contact tracing is not required.

Follow Up

Not indicated for uncomplicated infection.

Test of Cure (TOC)

Not required.

Retesting

Not indicated unless symptoms fail to resolve. Also consider alternative diagnoses.

Auditable Outcomes

- 100% of patients with recurrent *Candida* have had yeast cultures and

genital examination performed to inform further treatment.

Endorsement: These guidelines have been endorsed by the Blood Borne Viruses and Sexually Transmitted Infections Standing Committee (BBVSS).

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Funded by: The Australian Government Department of Health

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