OBSTETRICS AND GYNAECOLOGY
CLINICAL PRACTICE GUIDELINE

Infections (vaginal): Candidiasis, trichomoniasis, bacterial vaginosis

(Previously titled 'Vaginal Infections: Antibiotic Treatment for')

Scope (Staff):	WNHS Obstetrics and Gynaecology Directorate staff
Scope (Area):	Obstetrics and Gynaecology Directorate clinical areas at KEMH and OPH

This document should be read in conjunction with this Disclaimer

Candidiasis

For more detail see Non-Notifiable Infections within the Department of Health WA Silver Book: Candidiasis or Australian Therapeutic Guidelines: Dermatology, Anogenital skin conditions - search under **Candidal Vulvovaginitis**

Considerations:

- Asymptomatic infection does not require treatment
- Any of the imidazole preparations are effective, either as cream or pessaries. Various preparations are available for either single dose therapy, or three to seven days of therapy.
- Topical nysatin is a possible alternative to topical azoles
- Non albicans candida species (approx 20% of cases) may not respond to azole therapy. Treatment with fluconazole should generally be avoided and specialist advice be obtained.
- Contributing factors include high estrogen content oral contraceptive pill or hormone replacement therapy and underlying type 2 diabetes
- Behavioural factors include the use of tight fitting synthetic clothing, vaginal douching and use of daily panty liners
- Alternative causes of vulvovaginitis should be considered if therapy fails to control symptoms

Treatment options:

There are many different formulations available, see KEMH pharmacy resources for medications routinely stocked at KEMH.

- Clotrimazole– See Pharmacy Adult Medication Monograph: Clotrimazole

  OR

- Nystatin- See Pharmacy Adult Medication Monograph: Nystatin

Notes about topical treatments-

- Prolonged use should be avoided as contact dermatitis may result.
- Vaginal creams and pessaries may weaken latex condoms and diaphragms

Topical treatment in pregnancy

A 12-14 day course is recommended due to lower response rates and more frequent relapse.

Oral therapy

Oral therapy with fluconazole, including doses of 150mg-300mg has been associated with a statistically significant increase risk of spontaneous miscarriage compared with unexposed women and women with topical azole exposure in pregnancy. The evidence for an increased chance of miscarriage after a single dose is not clear. Decisions regarding fluconazole use in pregnancy require careful consideration of potential risks and benefits.

Generally, systemic treatment with fluconazole should be avoided in pregnancy. Oral treatments are no more effective than topical preparations for uncomplicated infections.

Fluconazole is considered teratogenic at higher continuous daily doses (> 400mg a day) as in utero exposure has resulted in a pattern of malformations similar to Antely-Bixler syndrome. Data suggests no increased risk of congenital anomalies after single doses of 150 mg.

Refractory candidiasis

Some strains of candida are more resistant to treatment than others. In cases of refractory candidiasis the candida species should be identified by the laboratory. This will need to be requested on the pathology form, or the microbiology laboratory contacted to arrange.

*Candida glabrata which has failed treatment with imidazoles can be treated with boric acid 600 mg pessaries per vagina (one per night) for two weeks. These need to be manufactured. There is limited safety data re use in pregnancy. Seek specialist advice.

Topical nystatin is an alternative treatment for non albicans candida spp.

Recurrent candidiasis

Four or more episodes of symptomatic vaginal candidiasis occurring over 12 months may require a 2 step process.

Symptoms should be controlled with daily topical or oral therapy until symptoms have resolved. Relapse prevented with 1-2 times weekly maintenance therapy- either topical or systemic. Many different alternate regimens are published.

For example, a topical or systemic approach could be:

- Nystatin 100 000U/5g 1 applicatorful, intravaginally, at night (suitable for pregnant women) followed by 1-2 times weekly use[1]

  OR

- Fluconazole 50 mg orally, once daily (if non pregnant) followed by 50 mg 1-2 times per week is recommended in Therapeutic Guidelines with review at 3 months[1]. However a regimen of 150mg every 3 days for 3 doses, then 150mg once a week for 6 months is also recommended in other guidelines[2, 3] and is the preferred regimen at the KEMH Sexual Health Clinic.

Trichomoniasis

See Non-Notifiable Infections section- Department of Health WA Silver Book:

- **Trichomoniasis**

NAAT (PCR) of a dry vaginal swab or first void urine specimen is the preferred test.

Note: treatment of partner(s) is indicated

Bacterial vaginosis

See Non-Notifiable Infections in Department of Health WA Silver Book:

- **Bacterial vaginosis: '**Treatment' (including initial, recurrent and in pregnancy)

Systemic treatment is usually advised in pregnancy, although topical clindamycin 2% vaginal cream is given as a treatment option for <20 weeks gestation in therapeutic guidelines.

Sexual Health Clinic KEMH

Internal referrals- use eReferral. For GP referral to the Sexual Health Clinic at KEMH.

Any patient with refractory candidiasis or non albicans candidiasis can be referred to this clinic.

References

1. eTG Complete. Anogenital skin conditions: Candidal vulvovaginitis in women: Therapeutic guidelines; 2021. Available from: http://online.tg.org.au
2. Sobel J. Recurrent vulvovaginal candidiasis. **AJOG**. 2016:15-21.
3. Lines A, Vardi-Flynn I, Searle C. Recurrent vulvovaginal candidiasis. **BMJ**. 2020;369:m1995.

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Belayneh M, Sehn E, Korownyk C. Recurrent vulvovaginal candidiasis. **Canadian Family Physician**. 2017; 63: 455.

Matheson A, Mazza D. Recurrent vulvovaginal candidiasis: A review of guideline recommendations. **ANZJOG**. 2017;57:139-145.

Mølgaard-Nielsen D, Svanström H, Melbye M, Hviid A, Pasternak B. Association between Use of Oral Fluconazole During Pregnancy and Risk of Spontaneous Abortion and Stillbirth. **JAMA**. 2016;315(1):58-67.

Silver Book Guidelines for Managing Sexually Transmitted Infections (Accessed 1 Dec 2020). Govt. of Western Australia, Department of Health, Public Health.

Related WNHS policies, procedures and guidelines

KEMH Clinical Guidelines:

Obstetrics & Gynaecology:

- Infections (O&G): Antibiotic treatment and prophylaxis guidelines
- Sexually Transmitted Infections
- Vaginal Procedures

Pharmacy A-Z: Clindamycin, Clotrimazole, Fluconazole, Metronidazole, Nystatin

GP resources: KEMH Referrals webpage

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NSQHS Standards (v2) applicable:	1: Clinical Governance, 3: Preventing and Controlling Healthcare Associated Infection, 4: Medication Safety		

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Version history

Date	Summary
Prior to Oct 2014	Contact pharmacy for versions prior to 2014. Previously within section Pharmacy and Medications Guidelines: Specific Medication Guidelines, P 4.4, titled: 'Antibiotic Treatment for Vaginal Infections'
Oct 2014	Changed to P3.4 within Pharmacy: 'Guidelines relevant to obstetrics and midwifery'. Refer to pharmacy for details.
May 2016	• Moved to O&G guidelines (section A:14 'Obstetric and Gynaecological Infections'). Title changed to 'Vaginal Infections: Antibiotic Treatment for'. • Oral therapy with fluconazole, including doses of 150mg-300mg associated with a statistically significant increase risk of spontaneous miscarriage compared with unexposed women and women with topical azole exposure in pregnancy. Oral treatments are no more effective than topical preparations for uncomplicated infections.
Oct 2021	• **General**: Title changed to 'Infections (Vaginal): Candidiasis, Trichomoniasis, Bacterial Vaginosis' and added section for the Sexual Health Clinic at KEMH. • **Candidiasis**: ➢ Non albicans candida species may not respond to azole therapy ➢ Contributing factors include high estrogen content OCP or HRT and underlying type 2 diabetes ➢ Behavioural factors include the use of tight fitting synthetic clothing, vaginal douching and use of daily panty liners ➢ Consider alternative causes if therapy does not control symptoms ➢ **Treatment options**- links to pharmacy information ➢ **Oral therapy**- The evidence for an increased chance of miscarriage after a single dose is not clear ➢ **Refractory** candidiasis- Limited safety data re use in pregnancy. Topical nystatin is an alternative treatment for non albicans candida spp ➢ **Recurrent** candidiasis- Medication advice has changed- read section • **Trichomoniasis**: Now links direct to Silver Book. NAAT (PCR) of a dry vaginal swab or first void urine specimen is the preferred test. • **Bacterial vaginosis**: Now links direct to Silver Book. Topical clindamycin 2% vaginal cream is a treatment option for <20 weeks gestation. Endorsed by: Medicines and Therapeutics Committee (OOS) 24/092021 WNHS Health Service Permit Holder under the *Medicines and Poisons Regulations 2016* – 04/10/2021 Antimicrobial Stewardship Committee (OOS) – 06/10/2021 Obstetrics and Gynaecology Directorate Management Committee – 06/10/2021
August 2024	Clinical decision by Executive to extend review date by 12 months

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