

Premenopausal Chronic/ Recurrent vaginitis

Gynecology Dine and Learn

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I have no disclosures

Learning objectives

- Overview of common causes of premenopausal recurrent vaginitis
- Discuss management of recurrent vaginal yeast infections
- Review treatment for recurrent bacterial vaginosis
- Strategies to manage chronic discharge without initial diagnosis

Vaginitis is one of *the most* common reasons that female/AFAB patients access health care

Normal versus abnormal discharge in premenopause

NORMAL

- White, yellow tinged, or clear
- Thick or thin, generally odorless
- 4.0-4.5 pH
- Consistency and volume may change in response to cycle hormones, pregnancy, hormonal contraception

ABNORMAL

- Change in volume/color/odor
- Pruritus
- Burning, irritation
- Dyspareunia
- Dysuria

Common causes of recurrent vaginitis

- Infectious etiologies account for 70 % of vaginal symptoms
 - Vulvovaginal candidiasis (20-25%)
 - Bacterial vaginosis (40-50%)
 - Trichomonas vaginalis (15%)
 - Cervical infection with chlamydia/ gonorrhea
- Non infectious etiologies
 - Foreign body (tampon, condom)
 - Vulvar dermatitis (contact or irritant)
 - Vulvar dermatoses- lichen planus, lichen sclerosus, IBD
 - Inflammatory vaginitis
 - Physiologic leukorrhea
 - Hypoestrogenism

Case discussion

- 42 yo patient comes to your office with burning vaginal pain, dysuria. Multiple episodes this past year, typically around menstruation.
- Background history of type II diabetes
- Has tried topical clotrimazole but recurred shortly after.
- Changes to diet (increased yogurt consumption, decreased sugars) not helpful



Recurrent candida vulvovaginitis

- 75% of will experience candidal vaginitis in their lifetime, 10% will have recurrence
- Defined as >3-4 infections per 12 months
- Symptoms can include pruritus, thick white cheesy discharge, burning, erythema, dysuria. Typically odorless
- Vaginal swabs important as patient self diagnosis is of limited utility
 - Only 10% of patients correctly self-identified, increased to 30% if previous infection
- Risk factors include diabetes, recent antibiotic use, immunosuppression

Table 2. Treatment options for vulvovaginal candidiasis

Uncomplicated VVC*	Therapy	Medication	Dose
	Imidazole antifungals (over the counter)	Clotrimazole cream/ointment	1%: once daily × 7 days, or 2%: once daily × 3 days, or 10%: once only
		Insert/ovule/suppository	200 mg: once daily × 3 days or 500 mg: once only
		Miconazole cream/ointment	2%: once daily × 7 days, or 4%: once daily × 3 days
		Insert/ovule/suppository	100 mg: once daily × 7 days, or 400 mg: once daily × 3 days, or 1200 mg: once only
	Triazole antifungals	Fluconazole (oral) (over the counter)	150 mg: once only
		Terconazole cream (prescription only)	0.4%: once daily × 7 days
Recurrent VVC†			
	Induction	Imidazole cream	10 to 14 days, as for uncomplicated VVC above ¹²
		Fluconazole (oral)	150 mg: 3 doses, 72 hours apart ¹¹
		Boric acid insert	300 to 600 mg daily × 14 days ¹³
		Clotrimazole insert	500 mg: once monthly × 6 months ¹⁵
	Maintenance‡	Fluconazole (oral)	150 mg: once weekly ¹¹
		Boric acid insert	300 mg daily × 5 days at the beginning of each menstrual cycle ¹³
		Ketoconazole (oral)§	100 mg once daily ¹⁴
Non-albicans VVC			
		Boric acid insert	300 to 600 mg nightly × 14
		Flucytosine cream	5 g once daily × 14 days
		Amphotericin B suppository	50 mg once daily × 14 days
		Nystatin suppository	100 000 units once daily for 3 to 6 months ¹

*These types of antifungal regimens are equally effective, with resolution of symptoms occurring in up to 90%.¹⁰

†Treatment for recurrent VVC requires induction therapy followed immediately by maintenance treatment.

‡Maintenance therapy should continue for 6 months. In cases of recurrence after completed therapy, induction and maintenance treatment should be repeated. Recurrence rates on maintenance treatment are low but can be as high as 50% in women off all therapy.

§Monitoring is recommended for rare hepatotoxicity with long-term use and drug interactions.

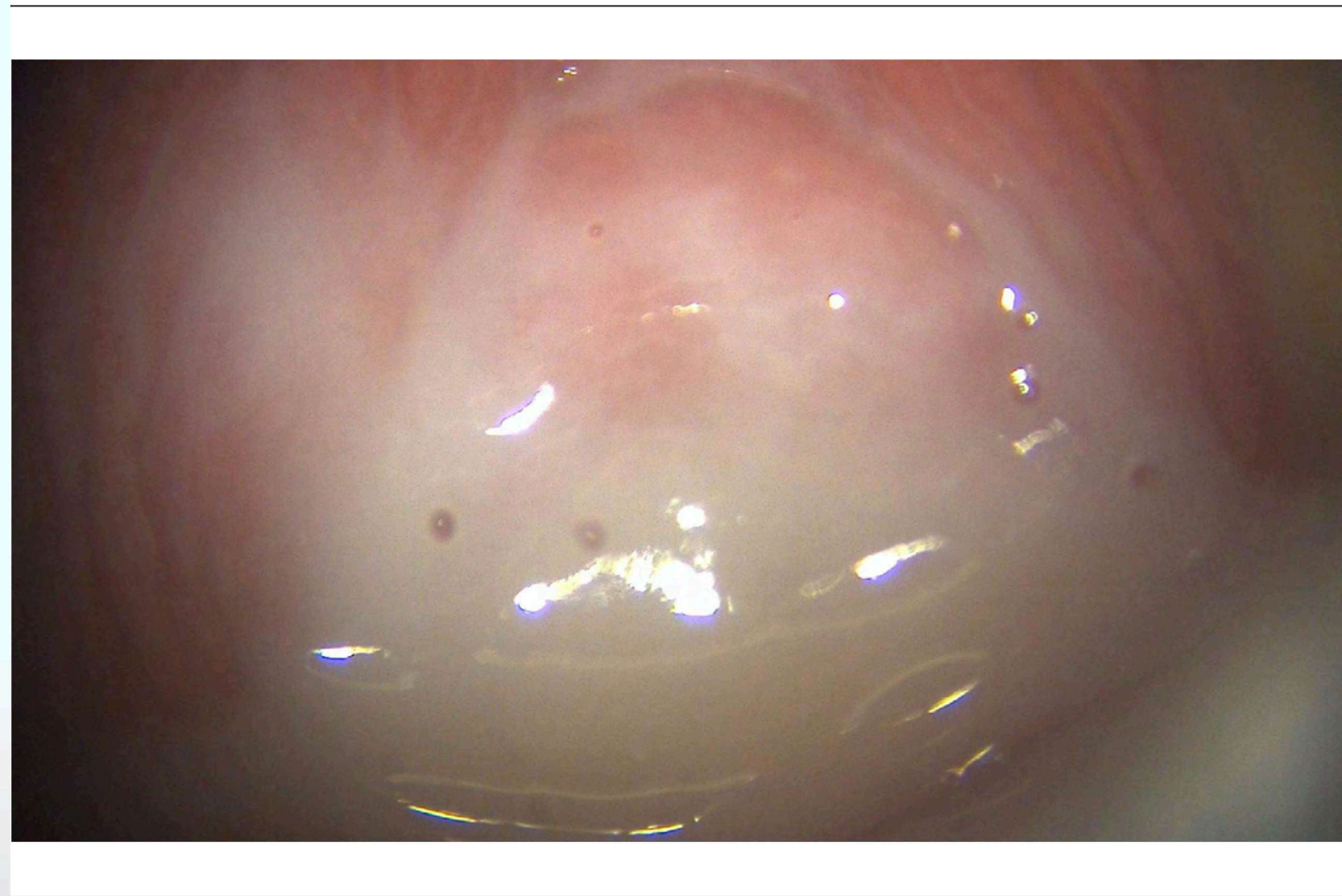
||Boric acid insert, flucytosine cream, and amphotericin B suppository used in combination

Practical points

- Severe infections usually require longer treatment
- Treatment in pregnancy- oral fluconazole and boric acid contraindicated. Use longer course (10-14 days) topical clotrimazole
- Difficult recurrent infections - worth requesting culture on vaginal swabs from lifelabs, speciation, consider diabetes and HIV testing
- Consider removal of IUD if symptomatic recurrences as may form biofilm on IUD

Case Discussion

- 35 yo comes to the office with recurrent foul smelling discharge
- Often happens after period
- New regular sexual partner and this is very anxiety provoking
- Has tried douching, vaginal antibiotics, oral probiotics, fluconazole and oral antibiotics



Recurrent bacterial vaginosis

- Significant medical burden- associated with preterm birth and other birth complications, postpartum infection, STIs, pelvic inflammatory disease, post operative vaginal cuff infection
- Defined as 3 or more infections in 12 months, reinfection common
- Risk factors include sexually active, multiple partners
- Symptoms include thin gray watery discharge, fishy odor
- Treat with longer induction phase therapy and maintenance therapy.
Vaginal candidiasis common during treatment and must be managed

SOGC Vulvovaginitis Guidelines 2015

ISSVD Vaginitis Guidelines 2023

TABLE 3.3 BV treatment algorithm for first-line, second-line, and alternative medications in the current clinical practice

First-line	Metronidazole tablets	500 mg oral twice daily for 7 days
	Metronidazole 0.75% gel	5 g intravaginally once daily for 5 days
	Clindamycin cream 2%	5 g intravaginally once daily for 7 days
Second-line	Tinidazole	1 g oral once daily for 5 days
	Tinidazole	2 g oral once daily for 2 days
	Clindamycin	300 mg oral 2 once daily for 7 days
	Clindamycin	100 mg vaginal suppositories once daily for 3 days
	Secnidazole	2 g oral, single dose (dissolved in a serving of pudding, applesauce, or yogurt)
Alternatives	Dequalinium chloride	10 mg tablets intravaginally once daily for 6 days
	Clindamycin phosphate 2% cream	Single vaginal dose
	Metronidazole 1.3% gel	Single vaginal dose
Recurrent BV	Metronidazole 0.75% gel	2 times/week for 4–6 months
	Triple phase regimen: oral nitroimidazole, vaginal boric acid, and vaginal metronidazole	Oral nitroimidazole once daily for 7 days Vaginal boric acid once daily for 3 weeks Vaginal metronidazole gel twice a week for 16 weeks
	Metronidazole 2 g + fluconazole 150 mg	Once a month
BV during pregnancy and lactation	Metronidazole tablets	500 mg oral twice daily for 7 days 250 mg oral 3 times daily for 7 days
	Clindamycin capsules	300 mg oral twice daily for 7 days
	Metronidazole 0.75% gel	5 g intravaginally once daily 5 days
	Clindamycin cream 2%	5 g intravaginally once daily 7 days

New research in recurrent Bacterial vaginosis

- Previously not thought to be an STI, but sexual activity and multiple partners are risk factors
- Earlier studies, including an RCT failed to show reduction of recurrence with partner treatment using oral metronidazole
- NEJM 2025 open label RCT involving women with BV in monogamous relationship with male partner, total of 150 couples. Control- woman treated with routine antibiotics alone. Intervention- woman received routine tx, males received 7 days oral flagyl and 2% topical penile clindamycin
- Recurrence rate in treated group- 35% vs control of 63%.
- Minor adverse events- nausea, headache, metallic taste



Vodstrcil LA et al, NEJM 2025

Schwebke et al, 2021

What about patients with negative swabs????

About 25% of patients will have no diagnosis after initial evaluation.

Strategies for patients without an initial diagnosis

- Reconsider history, physical exam, speculum exam and swabs. **Red top vaginal swabs for BV/yeast/culture, aptima swab (NAAT) for chlamydia/gonorrhea/trichomonas**
- Were they symptomatic at time of swabs? If not, consider sending home with self swabs for the next time they are symptomatic
- Consider alternate etiologies for symptoms as there is considerable overlap. Example- pruritus = vulvovaginal candidiasis, lichen sclerosis, contact/irritant dermatitis, allergic reaction, VIN. Burning/irritation = candida, UTI, provoked vestibulodynia, inflammatory vaginitis, etc
- Consider multiple concurrent etiologies
- If exam and swabs repeatedly normal, consider vulvar skin care measures. BC Centre for Vulvar Health is an excellent resource (patient handouts)
- DON'T MISS (physical exam)- obvious vulvar/vaginal/cervical cancer, pelvic inflammatory disease, ulcerations, vaginal fistula. Warrant immediate specialist referral

SUMMARY

- Infectious causes most (BV, yeast, trichomonas) most likely. Treat based on swab results
- Physical exam and vaginal swabs critical as patient self diagnosis/care provision based on history can frequently lead to misdiagnosis and incorrect treatment
- Recurrent or severe yeast infection- fluconazole induction treatment, +/- weekly maintenance is the preferred treatment.
- Recurrent BV- prolonged 1st line antibiotics course, subsequent maintenance. Watch out for subsequent yeast
- Consider partner treatment with oral flagyl and topical clindamycin cream for recurrent BV
- Keep a broad differential if negative swabs, repeat exam

References, Resources

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- BC Centre for Vulvar Health handouts