



Successful treatment of chronic vaginitis

📌 Arm yourself with these best options for tackling insistent infection

Gadzooks! In preparing for the morning office practice session you notice that two patients with chronic vaginitis have been scheduled back to back in 15-minute slots.

Ms. A has chronic bacterial vaginosis. Ms. B has chronic yeast vaginitis. What are you going to do?

Chronic bacterial vaginosis

The normal vaginal microbiome is dominated by *Lactobacillus crispatus* and *Lactobacillus jensenii*. These

organisms produce hydrogen peroxide and keep the vaginal pH ≤ 4.5 . When *Gardnerella vaginalis* and associated anaerobic bacteria gain dominance in the vagina, bacterial vaginosis ensues. This infection is characterized by¹:

- homogenous, thin, grayish-white discharge that smoothly coats the vaginal epithelium
- pH > 4.5
- fishy odor when potassium hydroxide is added to a sample of the discharge
- clue cells on a saline wet mount.

Why is it prone to recur? If bacterial vaginosis was a simple infection, treatment with metronidazole or clindamycin should be very effective. But in many women the relief from symptoms provided by a single course of antibiotics is short-lived, and many patients experience recurrent bacterial vaginosis in the next few months.

The cause of this resistance to antibiotic treatment may be that *G vaginalis* and other anaerobes, such as *Atopobium* species, aggregate in vaginal biofilms that prevent the antibiotic from reaching the organism.² The biofilm provides a safe haven for the bacteria to regrow following a single course of treatment.³ In addition, the nutrient-limited environment inside the encapsulated

biofilm helps the bacteria to resist the toxic effects of the antibiotic.⁴

Another potential mechanism for bacterial vaginosis recurrence is that women destined to develop repeat infection often harbor *G vaginalis* encapsulated in biofilms in the mouth. These extravaginal bacteria often are found again in the vagina, suggesting that bacterial vaginosis can be acquired from extravaginal bacterial reservoirs.⁵ Investigators are developing approaches, such as intravaginal treatment with DNase, to destroy the vaginal biofilm in order to enhance the efficacy of antibiotic treatment.⁶

Treatment

Options for initial infection. There are three treatments for an initial occurrence of bacterial vaginosis⁷:

- oral metronidazole 500 mg twice daily for 7 days
- 0.75% metronidazole gel one applicator intravaginally once daily for 5 days, or
- 2% clindamycin cream one applicator intravaginally at bedtime for 7 days.

Long-term metronidazole for recurrence. Approximately half of women who respond to initial treatment will have bacterial vaginosis again within 1 year. If vaginitis caused by recurrent bacterial vaginosis

Instant Poll



What are your greatest clinical successes with the treatment of chronic bacterial vaginosis or chronic *Candida* vaginitis that you would like to share with our readers, your ObGyn colleagues?

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is diagnosed, a prolonged course of antibiotic treatment is warranted. Treatment starts with an induction regimen of the standard treatments listed in the paragraph above. This is followed by a long-term maintenance regimen using 0.75% metronidazole vaginal gel one applicator twice weekly for 4 to 6 months.⁸

Recurrent *Candida* vulvovaginitis

Four or more occurrences of symptomatic *Candida* vulvovaginitis in 12 months indicates recurrent infection. Recurrence is usually caused by reinfection with the same organism from a vaginal reservoir. For women with such repeat infection, vaginal cultures should be obtained to confirm *Candida* and to search for treatment-resistant species, such as *Candida glabrata*. (Many *C glabrata* organisms are resistant to standard fluconazole treatment.)

Treatment options

Long courses of oral or vaginal antimycotic agents can be effective treatment for recurrent *Candida* vulvovaginitis.

Fluconazole. One regimen is fluconazole 150 mg orally every 72 hours for 3 doses, followed by fluconazole 150 mg once weekly for 6 months.⁹ If patients relapse from this regimen, then the vaginitis should be retreated with fluconazole 150 mg orally every 72 hours for 3 doses, followed by fluconazole 150 mg weekly for 12 months.

Boric acid. If *C glabrata* is thought to be the cause of the infection, it may be difficult to eradicate with fluconazole. A regimen to treat recurrent vaginitis caused by *C glabrata* is intravaginal boric acid, a 600 mg capsule once nightly for 14 days.^{10,11} **This medication is not FDA-approved for this purpose and must be made by a compounding pharmacy. Boric acid can be fatal if swallowed rather than used intravaginally.** Care must be taken to avoid

access to these capsules by children.

Boric acid vaginal capsules also can be used to treat chronic bacterial vaginosis in combination with antibiotic therapy.¹²

Flucytosine. An alternative regimen to treat *C glabrata* is flucytosine vaginal cream one applicator nightly for 14 days. This vaginal cream must be compounded because it is not available as a commercial medication.

You are armed and ready

In retrospect, you realize that the morning office session schedule is going to be fine. You will treat Ms. A with a long course of metronidazole and Ms. B with a long course of fluconazole. Hopefully, they will both find relief from their symptoms. ☺



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