

# Vaginitis: Diagnosis and Treatment

HEATHER L. PALADINE, MD, MEd, and URMI A. DESAI, MD, MS, Columbia University Irving Medical Center, New York, New York

*Am Fam Physician.* 2018 Mar 1;97(5):321-329.

► **Patient information:** See related handout on [vaginitis](http://www.aafp.org/afp/2018/0301/p321-s1.html) (<http://www.aafp.org/afp/2018/0301/p321-s1.html>), written by the authors of this article.

This clinical content conforms to AAFP criteria for continuing medical education (CME). See the CME Quiz Questions. (<http://www.aafp.org/afpquiz>).

Author disclosure: No relevant financial affiliations.

Vaginitis is defined as any condition with symptoms of abnormal vaginal discharge, odor, irritation, itching, or burning. The most common causes of vaginitis are bacterial vaginosis, vulvovaginal candidiasis, and trichomoniasis. Bacterial vaginosis is implicated in 40% to 50% of cases when a cause is identified, with vulvovaginal candidiasis accounting for 20% to 25% and trichomoniasis for 15% to 20% of cases. Noninfectious causes, including atrophic, irritant, allergic, and inflammatory vaginitis, are less common and account for 5% to 10% of vaginitis cases. Diagnosis is made using a combination of symptoms, physical examination findings, and office-based or laboratory testing. Bacterial vaginosis is traditionally diagnosed with Amsel criteria, although Gram stain is the diagnostic standard. Newer laboratory tests that detect *Gardnerella vaginalis* DNA or vaginal fluid sialidase activity have similar sensitivity and specificity to Gram stain. Bacterial vaginosis is treated with oral metronidazole, intravaginal metronidazole, or intravaginal clindamycin. The diagnosis of vulvovaginal candidiasis is made using a combination of clinical signs and symptoms with potassium hydroxide microscopy; DNA probe testing is also available. Culture can be helpful for the diagnosis of complicated vulvovaginal candidiasis by identifying nonalbicans strains of *Candida*. Treatment of vulvovaginal candidiasis involves oral fluconazole or topical azoles, although only topical azoles are recommended during pregnancy. The Centers for Disease Control and Prevention recommends nucleic acid amplification testing for the diagnosis of trichomoniasis in symptomatic or high-risk women. Trichomoniasis is treated with oral metronidazole or tinidazole, and patients' sex partners should be treated as well. Treatment of noninfectious vaginitis should be directed at the underlying cause. Atrophic vaginitis is treated with hormonal and nonhormonal therapies. Inflammatory vaginitis may improve with topical clindamycin as well as steroid application.

Vaginitis is characterized by vaginal symptoms, including discharge, odor, itching, irritation, or burning.<sup>1</sup> Most women have at least one episode of vaginitis during their lives,<sup>2</sup> making it the most common gynecologic diagnosis in primary care. Studies have shown a negative effect on quality of life in women with vaginitis, with some women expressing anxiety, shame, and concerns about hygiene, particularly in those with recurrent symptoms.<sup>3-5</sup>

## WHAT IS NEW ON THIS TOPIC

### Vaginitis

A 2013 meta-analysis showed that oral or topical antibiotic treatment of bacterial vaginosis in pregnancy does not prevent preterm birth, even in women with a history of preterm labor in previous pregnancies.

Newer laboratory tests such as DNA and antigen testing for bacterial vaginosis and vulvovaginal candidiasis, or vaginal fluid sialidase testing for bacterial vaginosis, may have similar or better sensitivity and specificity compared with traditional office-based testing. However, comparative cost-effectiveness has not been studied.

 [Enlarge](#) (<hi-res/afp20180301p321-ut1.gif>)  [Print](#)

## SORT: KEY RECOMMENDATIONS FOR PRACTICE

CLINICAL RECOMMENDATION	EVIDENCE RATING	REFERENCES
Symptoms alone cannot differentiate between the causes of vaginitis. Office-based or laboratory testing should be used with the history and physical examination findings to make the diagnosis.	C	<a href="#">10-12</a>
Do not obtain culture for the diagnosis of bacterial vaginosis because it represents a polymicrobial infection.	C	<a href="#">9</a>
Nucleic acid amplification testing is recommended for the diagnosis of trichomoniasis in symptomatic or high-risk women.	C	<a href="#">9</a>
Treatment of bacterial vaginosis during pregnancy improves symptoms but does not reduce the risk of preterm birth.	A	<a href="#">44, 45</a>

CLINICAL RECOMMENDATION	EVIDENCE RATING	REFERENCES
In nonpregnant women, oral and vaginal treatment options for uncomplicated vulvovaginal candidiasis have similar clinical cure rates.	B	<a href="#">47</a>
<p><b>A</b> = consistent, good-quality patient-oriented evidence; <b>B</b> = inconsistent or limited-quality patient-oriented evidence; <b>C</b> = consensus, disease-oriented evidence, usual practice, expert opinion, or case series. For information about the SORT evidence rating system, go to <a href="http://www.aafp.org/afpsort">http://www.aafp.org/afpsort</a> (<a href="http://www.aafp.org/afpsort">http://www.aafp.org/afpsort</a>).</p>		

**Continue reading from March 1, 2018** (<https://www.aafp.org/afp/2018/0301/>)

**Previous: Buprenorphine Therapy for Opioid Use Disorder** (<https://www.aafp.org/afp/2018/0301/p313.html>)

**Next: Care of the Colorectal Cancer Survivor** (<https://www.aafp.org/afp/2018/0301/p331.html>)

**View the full table of contents >>** (<https://www.aafp.org/afp/2018/0301/>)

Copyright © 2018 by the American Academy of Family Physicians.

This content is owned by the AAFP. A person viewing it online may make one printout of the material and may use that printout only for his or her personal, non-commercial reference. This material may not otherwise be downloaded, copied, printed, stored, transmitted or reproduced in any medium, whether now known or later invented, except as authorized in writing by the AAFP. Contact [afpserv@aaafp.org](mailto:afpserv@aaafp.org) (<mailto:afpserv@aaafp.org>) for copyright questions and/or permission requests.

Want to use this article elsewhere? [Get Permissions](https://www.aafp.org/journals/afp/permissions/requests.html) (<https://www.aafp.org/journals/afp/permissions/requests.html>).

Vaginitis: Diagnosis and Treatment - - American Family Physician

<https://www.aafp.org/afp/2018/0301/p321.html>

Copyright © 2019 American Academy of Family Physicians. All rights reserved.

11400 Tomahawk Creek Parkway • Leawood, KS 66211-2680

800.274.2237 • 913.906.6000 • Fax: 913.906.6075 • [contactcenter@aaafp.org](mailto:contactcenter@aaafp.org)

