What You Should Know About **Yeast Infections**

t is not surprising that most women can recognize the symptoms of a vaginal yeast infection since 75 of every 100 women experience this uncomfortable condition at least once in their lifetime. In fact, vaginal infections are one of the most common reasons that women aged 15 to 44 years see their health care provider.

Defining Yeast Infection

What most women call "yeast" is actually a fungus called *Candida*. The medical term for vaginal yeast infection is vulvovaginal candidiasis, often shortened to candidiasis. The "vulvo" part of this term refers to the vulva, or vaginal lips, clitoris, and tissues, which are located just outside of the vagina. During an episode of candidiasis, both the vagina and the vulva can become itchy, sore, and swollen.

The term vaginitis refers to any kind of vaginal infection. In addition to *Candida*, bacterial vaginosis (BV), trichomonas, and other organisms can cause vaginitis.

Small amounts of *Candida* can be found in the vaginas of about two of every 10 women who don't have the symptoms of a yeast infection. It is also found on the skin and in the mouth, stomach, and intestines of healthy women. Normal bacteria in the vagina prevent the candida from taking over and causing symptoms. When the healthy vaginal environment is disturbed, *Candida* starts growing. Antibiotic, steroid, or estrogencontaining medication use can cause this disturbance. Conditions such as pregnancy, diabetes, or human immunodeficiency virus (HIV) may also predispose women to candidiasis. However, in most women, no specific reason for candidiasis can be found.

Diagnosing Candidiasis

Women often become aware they have vaginal candidiasis when they notice a clumpy or watery white discharge on their underwear. Another common symptom is itching and swelling of the vaginal lips. Because the vulva is so irritated, urination and sex may be painful.

To make the diagnosis, your health care provider will ask about your symptoms, sexual history, birth control method, general health, medication use, and use of products that come in contact with the vulva or vagina. This will give him or her clues about whether the problem is likely to be candidiasis, another type of vaginitis, a skin reaction to a new soap, or another condition, as well as whether to test for sexually transmitted infections (STIs).

During the exam, your health care provider will first check the vulva for redness, swelling, sores, or other abnormalities. He or she will then insert a speculum into your vagina to look at the vaginal walls and cervix, and will take a sample with a small wooden stick or cotton swab to view under a microscope. He or she might also take samples to test for STIs.

Most health care providers can check for Candida while you are in their office. If your symptoms resemble Candida and no other conditions are found, your health care provider may

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suggest you use the *Candida* treatment and return if symptoms don't go away.

If you have used a vaginal cream or suppository to try to treat your symptoms or if you have your period, wait a few days before getting an exam. Creams, suppositories, and menstrual blood can cover up *Candida* on the microscope slide.

Treatment

Candida infections are easy to treat, and medications are available in cream, suppository, or vaginal tablet form, many without a prescription. They are placed in the vagina before bedtime for 1, 3, or 7 days, depending on the medication instructions. If you have severe external itching, the cream may be most helpful, since it can be spread on the vaginal lips to soothe them. Creams, suppositories, and vaginal tablets are considered safe during pregnancy. If you are using an over-the-counter product, read the label to be sure it contains the medications that specifically treat yeast infections (butoconazole, clotrimazole, miconazole, tioconazole).

Fluconazole, a tablet taken by mouth, is available only by prescription. Although only one dose is needed, it may take a few days for the symptoms to go away completely.

Since Candida is not considered an STI, your sexual partner does not need to be treated, and you will not give him or her the infection. If your partner is a woman, you should wash

shared sex toys and/or cover them with a condom.

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Recurrence of Infection

About 45 of every 100 women have more than one Candida infection in their lifetime. If you have occasional yeast infections—less than four times a year—and recognize the symptoms, it is generally safe to use a nonpre-

scription product. However, if your symptoms seem different, or if they don't go away with the usual treatment, see your health care provider.

If you experience four or more recurrent infections in 1 year, your health care provider can work with you to control this condition by taking the following steps:

Resources

- Medline Plus http://www.nlm.nih.gov/medlineplus/ency/ article/001511.htm
- National Institute of Allergy and Infectious Diseases
 National Institutes of Health http://www.niaid.nih.gov/factsheets/stdvag.htm

Confirm Diagnosis.—To confirm the diagnosis of recurrent candidiasis, your health care provider can take a culture. In this test, the laboratory watches the culture for up to a month to see if *Candida* grows on fluid swabbed from the vagina. This test can also identify types of *Candida* that are not cured by the most common treatments. Reasons for Recurrent Infection.—Your health care provider will review the medications you are taking to see if any of them might be contributing to the recurrent candidiasis. He or she may also suggest tests for diabetes and HIV. However, in at least half of all women with recurrent infections, no reason can be found.

Appropriate Treatment.—Recurrent candidiasis can be controlled. This may involve using vaginal suppositories or oral medication regularly (daily, weekly, or monthly) for at least 6 months. If a less common type of *Candida* is identified on the culture, you may need to use a specific type of medication, or use one of the common medications for a longer period of time.

In Summary

Although *Candida* infections can be uncomfortable, they are not dangerous and can be cured. If you have first-ever symptoms of a *Candida* infection, see a health care provider for a definite diagnosis. If symptoms recur occasionally and you are sure you have a *Candida* infection, it is okay to use the over-the-counter products available. However, if your symptoms are different than usual, or if they don't go away with treatment, see your health care provider.

This Patient Handout was prepared by Diane E. Judge, APN/CNP, using materials from Sexually Transmitted Diseases Treatment Guidelines 2002, MMWR Recommendations and Reports, May 10, 2002.