

## Vulvovaginitis – What is it?

If you've ever had unusual vaginal discharge, burning, itching, or bad odor, you've probably had first-hand experience with vulvovaginitis. This term refers to swelling, irritation, or infection of the vagina and the vulva (the area outside the vagina, including the vaginal lips, clitoris, and tissues surrounding the vagina). Vulvovaginitis, a term often shortened to "vaginitis," has many different causes. This pamphlet discusses the 3 most common vulvovaginal infections. However, other conditions can mimic the symptoms. For instance, genital herpes can cause burning and itching, allergy to soap or detergent can cause itching, a forgotten tampon can cause a foul odor, and sexually transmitted infections (STIs) can cause discharge. You should visit your clinician if symptoms last longer than a few days.

### Which Infection Is It?

Neither you nor your clinician can tell for sure which vaginal infection you have just by the symptoms. Your clinician will usually do an exam and look at a sample of vaginal fluid under a microscope. She might be able to tell you right away what is causing the problem, or she might need to send a sample to a laboratory for culture (during culture, organisms can be grown and identified). Because some organisms grow slowly, it may take a while to get culture results. In addition, your clinician might send samples to a laboratory for STI testing.

### Bacterial Vaginosis

Bacterial vaginosis (BV), the most common type of vulvovaginitis, can cause vaginal discharge, irritation, and an odor that's usually described as fishy, although some women have no symptoms at all. BV is usually detected under the microscope. Although it is not considered to be an STI and male partners do not need to be treated, BV is less common in women who have never had intercourse.

BV is usually treated for one week with oral antibiotics, either metronidazole or clindamycin, or with vaginal gels or creams that contain these antibiotics. Use of alcohol while taking oral metronidazole can cause severe vomiting, so do not drink alcohol or use alcohol-containing cough or cold medications during, or for several days after treatment.

All women with BV who have symptoms should be treated. Also, because having BV during pregnancy can cause serious problems, some clinicians treat all pregnant women who have BV, whether or not they have symptoms. BV also might cause pelvic infection after hysterectomy or abortion and may make it easier for HIV to enter the bloodstream. Yet, it is not clear whether all women who have BV without symptoms should be treated. If you do not have symptoms but your clinician finds this infection on a routine exam, she will discuss your options with you. BV can return frequently in some women. There is no known way to prevent repeated infections; consistent use of condoms may help.

### Trichomoniasis

*Trichomonas vaginalis* causes this type of vaginitis, marked by a large amount of irritating, yellow-green discharge. Trichomoniasis is sexually transmitted; your male partner will need to be treated. Most men do not have any symptoms of trichomoniasis and might not believe that they have the infection. You can ask your clinician for written information to help you explain to your partner why he needs treatment.

Trichomoniasis is usually diagnosed by looking under the microscope; however, *T. vaginalis* can be difficult to see. If you are told that you don't have an infection but your symptoms continue, you should be reexamined.

Trichomoniasis is treated with a one-time oral dose of the antibiotic metronidazole. If both you and your male partner are treated, it is helpful for you to take the medication at the same time. And remember, you should not drink alcohol during metronidazole treatment (see the instructions under "Bacterial Vaginosis").

Metronidazole is the only medication generally available in the U.S. to treat trichomoniasis. Some women have a type of trichomoniasis that is difficult to cure with metronidazole. If your symptoms don't go away, or if they return even when you are absolutely certain that your male partner has taken metronidazole, your clinician might perform special cultures and adjust your treatment accordingly.

## **Candida Vulvovaginitis**

Often called a yeast infection, candida vulvovaginitis is caused by a fungus. Three out of four women will have this problem at least once in their lifetimes. Usual symptoms include severe itching of the vulva and swelling of the vaginal lips. There may be a white, clumpy discharge or no discharge at all.

Because medication for yeast infections is available without a prescription, it can be tempting to skip the clinician's office and go straight to the drugstore. If your clinician has diagnosed a yeast infection in the past (longer than 2 months before your current infection) and the current symptoms are identical to previous ones, just going to the drugstore probably is safe.

If your clinician diagnoses candida, you have many choices of medication. Some vaginal creams, suppositories, and tablets containing very concentrated amounts of medication are inserted into the vagina only once; others are used for three or seven nights. A single-dose, prescription, oral tablet also works well; however, it may take up to three days for the irritation to improve. Pregnant women should use a seven-day vaginal cream or suppository. For severe vulvar itching and swelling, cream also can be spread on the vulva.

About five in every 100 women have recurrent yeast infections each year. If you have recurrent infections, work with your clinician to control them. Your clinician should take a sample for culture, because there are different types of candida, some of which can't be seen under the microscope. You should be tested for diabetes and HIV, conditions that make recurrences more likely; however, most women with frequent yeast infections do not have either condition. Treatments for recurrent candida include vaginal anti-yeast medications used for more than seven days or several doses of oral medication. Another possibility is vaginal boric-acid suppositories. However, boric acid is harmful if swallowed, so keep the suppositories out of the reach of children, and avoid receiving oral sex during treatment. Candida vulvovaginitis is not an STI, so male partners usually do not need treatment.

## **Preventing Vulvovaginitis**

Some women believe they can prevent yeast infections by eating yogurt to replace the "good bacteria" in the vagina, or by taking lactobacillus tablets. Although neither measure is harmful, it's hard to tell if either yogurt or the tablets have enough or the right type of lactobacillus to help prevent infections. Also, some women find that wearing loose, cotton clothing and underwear, rather than synthetic or tight garments, is helpful. Using condoms every time you have intercourse helps prevent trichomoniasis and possibly BV. Finally, don't scrub the vulva, and don't wash inside the vagina with soap. Gently washing the vulva with plain water or mild soap is sufficient.