

UNIVERSITY STUDENT HEALTH SERVICES • Fact Sheet

BACTERIAL VAGINOSIS**WHAT IS IT?**

Bacterial vaginosis (BV) is the most common cause of abnormal vaginal discharge in individuals of childbearing age. A change in the ratio of bacteria normally found in the vagina results in decreased numbers of lactobacilli and an overgrowth of anaerobic bacteria. The byproducts of the anaerobic bacteria's metabolism raise the vaginal pH and lead to the development of symptoms.

WHAT ARE RISK FACTORS FOR BV?

- The most important risk factor for BV is sexual activity:
 - Studies show that having new or multiple sexual partners increases the risk of BV.
 - BV can also be transmitted via sex toys, oral-genital contact, and fingers.
 - Having other sexually transmitted infections (STIs) is associated with an increased risk of BV.
- Douching is a significant risk factor because it disrupts the natural bacterial balance of the vagina. Based on our clinical experience, we also discourage the use of scented vaginal products, Vagisil, and Summer's Eve for the same reasons.
- Studies show that cigarette smoking is a risk factor for BV.

WHAT ARE THE SYMPTOMS?

- Up to 70% of individuals with BV have no symptoms.
- The most common symptom is an abnormal vaginal discharge that has an unpleasant "fishy" odor. The odor is often more noticeable after intercourse or during menses. The discharge is often watery and grayish-white, but characteristics can vary.
- BV does not typically cause burning with urination, pain with intercourse, or significant vaginal pain/soreness. Other causes of these symptoms should be ruled out.

WHAT ARE POSSIBLE COMPLICATIONS?

BV has been associated with some health problems:

- BV is a known risk factor for acquiring and spreading HIV.
- BV is associated with an increased risk for acquiring STIs, including chlamydia, gonorrhea, herpes, and trichomonas.
- BV can increase the risk of developing pelvic inflammatory disease (PID) if the bacteria invade the uterus or fallopian tubes. This is more likely to occur following a gynecologic procedure (eg. abortion or hysterectomy) or vaginal delivery.
- BV can increase the risk for preterm delivery in those who are pregnant.

HOW IS IT DIAGNOSED?

Your medical provider will examine a sample of vaginal secretions under the microscope and/or use other diagnostic tests to diagnose BV and rule out other causes of your symptoms.

WHEN IS TREATMENT RECOMMENDED?

BV resolves without treatment in up to one-third of non-pregnant individuals and one-half of pregnant individuals.

Treatment is recommended in:

- Patients with symptoms, since treatment may decrease the risk of acquiring STIs.
- Patients without symptoms who are planning a gynecologic procedure; in these cases, treatment for BV should be completed prior to the procedure.

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WHAT IS THE TREATMENT?

Antibiotics are used to decrease the overgrowth of anaerobic bacteria that cause the abnormal vaginal discharge. Metronidazole & clindamycin are the two most commonly used antibiotics for BV:

- **Metronidazole (Flagyl)**
 - **In pill form**, metronidazole 500mg is taken by mouth twice daily for 7 days. It should be taken with food as common side effects include nausea and/or a metallic taste in the mouth.
 - It is very important to avoid all alcohol while taking metronidazole and for 24 hours following its completion. Combining alcohol with metronidazole can cause severe nausea, vomiting, headache, and flushing.
 - Metronidazole pills should not be taken with warfarin (Coumadin), a blood thinning medication, as it may increase the risk of bleeding.
 - **As a vaginal gel**, metronidazole is applied inside the vagina at bedtime for 5 days. This treatment has fewer side effects but may be less convenient than taking a pill.
 - Alcohol should be avoided during treatment and for one day after treatment with metronidazole vaginal gel.
 - Metronidazole vaginal gel can be used with warfarin (Coumadin) without an increased risk of bleeding.
- **Clindamycin**
 - **Clindamycin vaginal cream** inserted into the vagina at bedtime for 7 days is the preferred regimen for this antibiotic. However, clindamycin vaginal cream should not be used with latex condoms as it can increase the risk of condom breakage; non-latex barriers should be used instead.
 - **Other formulations** include clindamycin 300mg pills taken by mouth twice daily for 7 days, a one-day vaginal cream, and a 3-day vaginal ovule. These forms of treatment may not be as effective as the 7-day vaginal cream.
- **Two other prescription pills** are available as alternative therapy. They offer a shorter course of treatment but are much more expensive and no more effective than metronidazole or clindamycin.

WHAT ABOUT SEXUAL PARTNERS?

- Most studies show no benefit from treating sexual partners who are anatomically male.
- Sexual partners with vaginal symptoms should be evaluated due to the high risk of concordant infection (25-50%). Treatment should be completed if a diagnosis of BV is made.

WHAT IF SYMPTOMS RETURN?

Recurrence of BV following treatment is common. The reason for this is unclear. About 30% of patients have a recurrence within 3 months, and more than 50% have a recurrence within 12 months.

- Treatment of recurrent BV is usually with another course of oral or vaginal antibiotics for 7 days. A treatment regimen different from the previous one may be recommended.
- Individuals with more than 3 documented episodes of BV over 12 months may be offered maintenance therapy with metronidazole vaginal gel twice a week for 4-6 months.
- Some experts recommend using boric acid vaginal suppositories in addition to oral antibiotic treatment for recurrent symptoms. Consult your medical provider for more information. Boric acid can cause death if swallowed. Therefore, it's important to store boric acid in a safe place that is out of reach of children.
- Probiotics have been used for both the prevention and treatment of BV. Thus far, studies are conflicting and more data is needed before probiotic use can be recommended.

WHAT CAN I DO TO PREVENT BV?

- Use condoms regularly, including with sex toys when possible. Clean sex toys after every use.
- Avoid having multiple sexual partners.
- Avoid using douches, scented vaginal products, Vagisil, and Summer's Eve.
- Do not smoke.
- Taking a birth control pill containing estrogen may be protective.

RECOMMENDED WEBSITES: www.cdc.gov, familydoctor.org