Bacterial Vaginosis (BV)

DEFINITION	Bacterial vaginosis (BV) results from replacement of the normal bacteria in the vagina with anaerobic bacteria. BV is associated with having multiple male sex partners, female partners, sexual relationships with more than one person, a new sex partner, lack of condom use, douching, and HSV-2 seropositivity. Male circumcision reduces the risk for BV among women. In addition, BV prevalence increases during menses.
SUBJECTIVE	May include: 1. No symptoms 2. Vaginal discharge 3. "Fishy" odor which is particularly noticeable following coitus 4. Introital dyspareunia or vulvar irritation
OBJECTIVE	May include: 1. Homogenous, thin, white discharge that smoothly coats the vaginal walls 2. Malodorous discharge 3. Minimal redness/irritation of vulva and vaginal walls
LABORATORY	Clinical criteria require three of the following symptoms or signs: 1. Homogeneous, thin, white discharge that smoothly coats the vaginal walls. 2. Clue cells (e.g., vaginal epithelial cells studded with adherent coccobacilli) on microscopic examination. 3. pH of vaginal fluid >4.5; or 4. A fishy odor of vaginal discharge before or after addition of 10% KOH (i.e., the whiff test) 5. Lactobacilli are usually absent 6. Other tests available include Affirm VPIII (non-CLIA waived), and the BV Blue test (CLIA waived.) A proline aminopeptidase card test has a low sensitivity and specificity, and is not recommended,
ASSESSMENT	Bacterial Vaginosis (BV)
PLAN	1. Treatment is recommended for all symptomatic women regardless of pregnancy status. 2. Treatment is not recommended for male partners. 3. Recommended regimens: a. Metronidazole* 500 mg PO 2 times/day for 7 days **OR** b. Metro-Gel 0.75% vaginal gel one applicator full (5g) intravaginally at bedtime x 5 day **OR** c. Clindamycin vaginal cream 2%, 1 applicator full (5g) intravaginally at bedtime x 7 days. 4. Alternative regimens: a. Clindamycin 300 mg PO 2 times/day for 7 days **OR** b. Clindamycin ovules 100 g intravaginally at bedtime for 3 days **OR** c. Tinidazole 2 g PO daily for 2 days **OR** d. Tinidazole 1 g PO daily for 5 days **OR** e. Secnidazole 2 g oral granules, one time dose (Secnidazole is not recommended for use during pregnancy or breastfeeding) 5. Treatment is recommended for symptomatic pregnant women. If a diagnosis of BV is made with a positive pregnancy test refer to https://www.cdc.gov/std/treatment-guidelines/STI-Guidelines-2021.pdf Pages 86-87 6. Treatment for breastfeeding clients: The recommended regimens may be used with breastfeeding. a. Although several reported case series found no evidence of metronidazole-associated adverse effects in breastfed infants, some clinicians advise deferring breastfeeding for 12–24 hours following maternal treatment with a single 2 g dose of metronidazole b. Tinidazole should be avoided during pregnancy/breastfeeding.

	7. Treatment – HIV infected clients. a. Persons with HIV and BV should receive the same treatment as persons without HIV. 8. Treatment options for women with persistent or recurrent BV: a. Retreatment with the same recommended regimen is an acceptable approach after the first occurrence. b. Using a different recommended regimen can be considered. c. 0.75% Metronidazole gel one applicator (5g) vaginal 2x a week for 4-6 months has been shown to decrease reoccurrence. d. Limited data suggest the following option for recurrent BV: metronidazole or tinidazole 500 mg PO bid for 7 days; follow with boric acid 600 mg vaginally at HS for 21 days; follow with suppressive 0.75% metronidazole gel 1 applicator (5g) at HS 2x a week for 4-6 months e. Monthly metronidazole 2 g PO once PLUS fluconazole 150 mg PO once has been evaluated as suppressive therapy; this regimen reduced the incidence of BV and promoted colonization with normal vaginal flora. 9. Use caution with oral Metronidazole in those with hepatic dysfunction (as indicated by elevated liver function tests or hepatitis in last 6-12 months), colitis, renal disease, & seizure disorders. 10. The use of Antabuse (disulfiram) and metronidazole may cause a drug interaction resulting in acute psychosis and confusion. 11. CDC STD Treatment Guidelines 2021 state that "All women with BV should be tested for HIV and other STDs."
CLIENT EDUCATION	1. Provide education handout, review symptoms, treatment options, and medication side effects. 2. Advise client of pertinent information regarding metronidazole, which should not be taken with alcohol because drug might cause severe nausea and vomiting. Alcohol should be avoided 24 hours before, during, and after treatment; 72 hours after taking tinidazole. Clindamycin can cause pseudomembranous colitis resulting in severe diarrhea. If symptoms occur patient should stop medication and seek immediate medical care. 3. Advise to avoid intercourse during treatment OR use condoms consistently. Douching may increase the in risk for BV 4. Avoid using contraceptive diaphragm and/or condoms during and at least 72 hrs. after treatment with clindamycin cream or ovules as it may weaken latex or rubber products. 5. Stress importance not to interrupt treatment during menses and not to use tampons during treatment. 6. Review safer sex education, as appropriate. 7. Recommend that client RTC if symptoms persist for re-evaluation.
CONSULT/ REFER TO PHYSICIAN	1. Women with history of hepatic disease, colitis, renal disease, or seizure disorders

References:

1. https://www.cdc.gov/std/treatment-guidelines/STI-Guidelines-2021.pdf
2. Hatcher RA, Nelson A, Trussell J, Cwiak C, Cason P, Policar MS, Edelman A, Aiken ARA, Marrazzo J, Kowel D, eds. Contraceptive Technology. 21 edition. New York, NY: Ayer Company Publishers, Inc., 2018. pp 597-600.
3. Vaginitis: Diagnosis and Treatment - American Family Physician (aafp.org) 2018