

FEATURE	NORMAL VAGINAL EXAMINATION	VULVOVAGINAL CANDIDIASIS	TRICHOMONAL VAGINITIS	BACTERIAL VAGINOSIS (BV)
Etiology	Uninfected; lactobacilli predominant	<i>Candida albicans</i>	<i>Trichomonas vaginalis</i>	Associated with <i>Gardnerella vaginalis</i> , various anaerobic bacteria, and mycoplasmas
Typical symptoms	None	Vulvar itching and/or irritation	Profuse discharge; vulvar itching	Malodorous, slightly increased discharge
Discharge				
Amount	Variable; usually scant	Scant	Often profuse	Moderate
Color ^a	Clear or translucent	White	White or yellow	White or gray
Consistency	Nonhomogeneous, flocculent	Clumped; adherent plaques	Homogeneous	Homogeneous, low viscosity; uniformly coats vaginal walls
Inflammation of vulvar or vaginal epithelium	None	Erythema of vaginal epithelium, introitus; vulvar dermatitis, fissures common	Erythema of vaginal and vulvar epithelium; colpitis macularis	None
pH of vaginal fluid ^b	Usually ≤ 4.5	Usually ≤ 4.5	Usually ≥ 5	Usually > 4.5
Amine ("fishy") odor with 10% KOH	None	None	May be present	Present
Microscopy ^c	Normal epithelial cells; lactobacilli predominant	Leukocytes, epithelial cells; mycelia or pseudomycelia in up to 80% of <i>C. albicans</i> culture-positive persons with typical symptoms	Leukocytes; motile trichomonads seen in 80–90% of symptomatic patients, less often in the absence of symptoms	Clue cells; few leukocytes; no lactobacilli or only a few outnumbered by profuse mixed microbiota, nearly always including <i>G. vaginalis</i> plus anaerobic species on Gram's stain (Nugent's score ≥ 7)
Other laboratory findings		Isolation of <i>Candida</i> spp.	Isolation of <i>T. vaginalis</i> or positive NAAT ^d	Diagnosis of BV by NAAT ^d
Usual treatment	None	Azole cream, tablet, or suppository—e.g., miconazole (100-mg vaginal suppository) or clotrimazole (100-mg vaginal tablet) once daily for 7 days Fluconazole, 150 mg orally (single dose)	Metronidazole or tinidazole, 2 g orally (single dose) Metronidazole, 500 mg PO bid for 7 days	Metronidazole, 500 mg PO bid for 7 days Metronidazole gel, 0.75%, one applicator (5 g) intravaginally once daily for 5 days Clindamycin, 2% cream, one full applicator vaginally each night for 7 days
Usual management of sexual partner	None	None; topical treatment if candidal dermatitis of penis is detected	Examination for sexually transmitted infection; treatment with metronidazole, 2 g PO (single dose)	None

^aColor of discharge is best determined by examination against the white background of a swab. ^bA pH determination is not useful if blood is present or if the test is performed on endocervical secretions. ^cTo detect fungal elements, vaginal fluid is digested with 10% KOH prior to microscopic examination; to examine for other features, fluid is mixed (1:1) with physiologic saline. Gram's stain is also excellent for detecting yeasts (less predictive of vulvovaginitis) and pseudomycelia or mycelia (strongly predictive of vulvovaginitis) and for distinguishing normal flora from the mixed flora seen in bacterial vaginosis, but it is less sensitive than the saline preparation for detection of *T. vaginalis*. ^dNAAT, nucleic acid amplification test (where available). NAAT for diagnosis of BV typically tests for combinations of BV-associated bacteria and absence of *Lactobacillus* species.

Inspection of the vulva and perineum may reveal tender genital ulcerations or fissures (typically due to HSV infection or vulvovaginal candidiasis) or discharge visible at the introitus before insertion of a speculum (suggestive of BV or trichomoniasis). Speculum examination permits the clinician to discern whether the discharge appears abnormal and whether it emanates from the cervical os (mucoid and, if abnormal, yellow) or from the vagina (not mucoid, since the vaginal epithelium does not produce mucus). Symptoms or signs of abnormal vaginal discharge should prompt testing of vaginal fluid for pH, for a fishy odor when mixed with 10% KOH, and for certain microscopic features when mixed with saline (motile trichomonads and/or "clue cells") and with 10% KOH (pseudohyphae or hyphae indicative of vulvovaginal candidiasis). Additional objective laboratory tests, described below, are useful for establishing the