

The ABC's of Vaginal Health...

A 182 Aerobic Vaginitis (AV)

- Group B Streptococcus (GBS)
- *Staphylococcus aureus*
- *Escherichia coli*
- *Enterococcus faecalis*

B 759 Bacterial Vaginosis (BV) with Lactobacillus Profiling by PCR

- *Fannyhessea vaginae* (*Atopobium vaginae*)
- Bacterial Vaginosis Associated Bacteria 1
- Bacterial Vaginosis Associated Bacteria 2
- Bacterial Vaginosis Associated Bacteria 3
- *Bacteroides fragilis*
- *Bifidobacterium breve*
- *Gardnerella vaginalis*
- *Megasphaera* type 1
- *Megasphaera* type 2
- *Mobiluncus curtisii*
- *Mobiluncus mulieris*
- *Prevotella bivia*
- *Sneathia sanguinegens*
- *Streptococcus anginosus*

Considered Medically Necessary by the CDC and Aetna for the Management of Vaginitis and the Diagnosis of Bacterial Vaginosis in Symptomatic Women^{1, 2}

C 560 Candida Vaginitis (CV)

- *Candida albicans*
- *Candida glabrata*
- *Candida krusei*
- *Candida parapsilosis*
- *Candida tropicalis*

Fluconazole Resistance Testing Available

Diagnostic Advantages...

- One vial, multiple pathogens
- DNA amplification via PCR technology
- Microbial drug resistance profiling
- High precision robotic accuracy
- High diagnostic sensitivity & specificity
- Specimen viability up to 5 days after collection
- Test additions available up to 30 days after collection
- No refrigeration required before or after collection
- Blood and excess mucus will not affect results



References:

1. **Diagnosis of Vaginitis** 2022, October 31 . "Diagnosis of Vaginitis". https://www.aetna.com/cpb/medical/data/600_699/0643.html
2. **Workowski KA, Bachmann LH, Chan PA, et al.** 2021, July 23. "Sexually Transmitted Infections Treatment Guidelines, 2021 ". <https://www.cdc.gov/mmwr/volumes/70/rr/rr7004a1.htm>

AV IS NOT BV

A Comparison of Bacterial Vaginosis and Aerobic Vaginitis

Clinical Characteristics	Bacterial Vaginosis	Aerobic Vaginitis (1)
Lactobacilli	Displaced	Displaced
Pathogen	<i>Gardnerella vaginalis</i> , <i>Atopobium vaginae</i> , <i>Megasphaera</i> species, BVAB2	<i>Escherichia coli</i> , Group B Streptococcus, <i>Staphylococcus aureus</i> , <i>Enterococcus faecalis</i>
Vaginal epithelial inflammation	None	Present
Elevation of pro-inflammatory cytokines (IL-1 β , IL-6, IL-8)	Moderate elevation	High elevation
Immune reaction (cytotoxic leukocyte)	Non-reactive	Reactive
pH [Normal = 3.8 – 4.2]	T= 4.2-4.5 BV \geq 4.5	> 4.5; usually >6
Shed vaginal epithelial cells	Clue cells	Parabasal cells
Vaginal discharge characteristic	White, homogenous	Yellowish
10% KOH Whiff Test (fishy amine odor)	Positive	Negative
Treatment	Metronidazole ^b Clindamycin ^b	Kanamycin ovule. (1) 2% clindamycin topical. (2) Fluoroquinolones are reported to have clinical success. (1) GBS is uniformly sensitive to penicillin, ampicillin, amoxicillin, amoxicillin/ clavulanic acid. (3) <i>E. faecalis</i> is traditionally treated with ampicillin. (4)

Fluoroquinolones, such as ciprofloxacin, ofloxacin, and levofloxacin, are contraindicated in pregnant women. Levofloxacin has improved efficacy against Streptococci compared to ciprofloxacin. T= Transitional.

References:

1. Larsson PG. 1992. Treatment of bacterial vaginosis. *Int J STD AIDS* 3: 239-247.
2. Sobel JD, Reichman O, Misra D, Yoo W. 2011. Prognosis and Treatment of Desquamative Inflammatory Vaginitis. *Obstet Gynecol* 117: 850-855.
3. Tempera, G, Bonfiglio G, Comparata E, Corsello S, Cianci A. 2004. Microbiological/clinical characteristics and validation of topical therapy with kanamycin in aerobic vaginitis: a pilot study. *Int J Antimicrob Agents* 24: 85-88.
4. Tempera G, Furneri PM. 2010. Management of Aerobic Vaginitis. *Gynecol Obstet Invest* 70: 244-249.