
Lab Dept: Microbiology

Test Name: GRAM STAIN FOR BACTERIAL VAGINOSIS

General Information

Lab Order Codes: GSBV

Synonyms: Gram Stain, Nugent's score, Nugent's criteria

CPT Codes: 87205 - Smear, primary source with interpretation; Gram or Giemsa stain for bacteria, fungi or cell types

Test Includes: Microscopic exam of Gram stained material including quantitative evaluation of microorganism and relevant cells. Samples will be evaluated for the presence of white blood cells, Clue cells, Yeast and morphology of vaginal microbiota.

Logistics

Test indications: Bacterial Vaginosis is a clinical syndrome in women during childbearing years characterized by an abnormal vaginal discharge. In bacterial vaginosis, the predominant microbiota of the vagina shifts from normally predominant lactobacilli to a mixture of Gardnerella vaginalis, Prevotella spp, Mobiluncus spp and other anaerobes. G. vaginalis organism appear as small Gram-variable pleomorphic bacilli, varying from coccobacilli to longer forms up to 2 to 3 μ m that palisade or appear coryneform. Mobiluncus spp. are curved Gram negative rods. The comparison of relative numbers of lactobacilli to Gram negative curved rods and Gram variable coccobacilli allows for the diagnosis of BV to be made. Interpretation of these Gram stains with Nugent's criteria remains the definitive laboratory method for diagnosis.

Lab Testing Sections: Microbiology

Phone Numbers: MIN Lab: 612-813-6280

Test Availability: Daily, 24 hours

Turnaround Time: 24 hours; test performed Monday–Friday 0700-2200, Saturday/Sunday 0700-1500

Special Instructions: Requisition must state specific date/time of collection

Specimen

Specimen Type: Vaginal secretions

Container:	Sterile cotton or Dacron swab
Collection:	Submit swab of vaginal fluid collected from posterior vaginal walls or posterior fornix.
Storage/Transport:	<p>Onsite collections: Transport to the Microbiology Laboratory immediately.</p> <p>Offsite collections: Refrigerate specimen. Specimens must be promptly transported to the laboratory with the next available courier, not to exceed 24 hours from the time of collection. However, delayed transport causes a delay of test results.</p>
Patient Preparation:	N/A
Sample Rejection:	Improperly labeled specimen; specimens with prolonged transit time (see Transport/Storage for requirements); specimen not submitted in appropriate transport container; insufficient volume; external contamination. If an unacceptable specimen is received, the physician or nursing station will be notified and another specimen will be requested before the specimen is discarded.

Interpretive

Reference Range:	<p>Morphology consistent with normal vaginal microbiota</p> <p>No Clue cells</p> <p>No White cells</p> <p>Negative for Yeast</p>
Critical Values:	N/A
Limitations:	<ul style="list-style-type: none"> • Gram stain results, including organism morphology, can be affected by the age of the isolate, bacteria containing autolytic enzyme systems, cultures transferred from antibiotic-containing media, as well as specimens collected from patients on antibiotics. • Background material and artifacts can also interfere with interpretation. A Gram positive coccoid artifact is inherent in the raw material currently used to make safranin.
Methodology:	Microscopy
References:	Leber, A. L. Clinical Microbiology Procedures Handbook. 4th Edition, 2016 ASM Press Washington, DC