LABORATORY DIAGNOSIS OF BACTERIAL VAGINOSIS (BV)

Gram stained vaginal smears for the diagnosis of bacterial vaginosis and vaginitis will be replacing the vaginal culture effective May 1, 2012.

A vaginal culture should not be used for the diagnosis of bacterial vaginosis. Bacterial vaginosis (BV) is a syndrome involving a shift in the concentrations of aerobic and anaerobic flora of the genitourinary tract flora from a predominant presence of Lactobacillus sp. to that of a mixture of anaerobes, Gardnerella vaginalis and other gram negative bacteria. Culturing for a particular organism, such as Gardnerella vaginalis, or any single organism or combination of organisms is not specific for the diagnosis of BV. Use of a scored Gram stain that demonstrates whether there has been a shift in the vaginal flora from predominantly gram positive Lactobacillus to a gram negative flora has been shown to correlate well with the Amsel criteria for the diagnosis of BV. Gram stain with scoring of relative amounts of microbial morphotypes is the definitive laboratory method for diagnosis. The BV gram stain test is only for women in childbearing years and post-menopausal women on estrogen replacement therapy.

Amsel criteria for the diagnosis of bacterial vaginosis:
- Homogeneous vaginal discharge (color and amount may vary)
- Amine (fishy) odor when potassium hydroxide solution is added to vaginal secretions (commonly called the "whiff test")
- Presence of clue cells on microscopy (highly significant criterion)
- Vaginal pH greater than 4.5

Smears for bacterial vaginosis will be stained and evaluated for the following:
- White Blood Cells & Red Blood Cells
- Clue cells
- Yeasts
- General pathogen morphotypes, such as intracellular gram-negative diplococci consistent with Neisseria spp.
- BV Score from 1-10
  - 0-3 = Morphotypes consistent with normal vaginal microbiota
  - 4-6 = Mixed morphotypes consistent with transition from normal vaginal microbiota
  - 7-10 = Mixed morphotypes consistent with bacterial vaginosis.

<table>
<thead>
<tr>
<th>Specimen</th>
<th>Vaginal Swab submitted in liquid Stuarts medium transported at room temperature</th>
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<tbody>
<tr>
<td>Expected Turnaround Time</td>
<td>Routine priority: 8 hours from receipt of specimen</td>
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<td></td>
<td>STAT priority: 1 hour from receipt of specimen</td>
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<tr>
<td>Test Order Code</td>
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<tr>
<td>Cost</td>
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