VAGINITIS SCREEN

I. Introduction

The most common causes of adult vaginitis are Candida albicans, Trichomonas vaginalis, and bacterial vaginosis which can be diagnosed using a wet mount and gram stain. Routine cultures are not necessary. For pre-pubescent and post-menopausal patients, laboratory diagnosis of bacterial vaginosis has not been validated and interpretation of gram stain results needs to take this into account.

II. Specimen Collection and Transport

See Pre-Analytical – Specimen Collection QPCMI2001 Vaginal Swab for Vaginitis/Vaginosis Screen

III. Reagents and Media

See Analytical Process - Bacteriology Reagents/Materials/Media List QPCMI10001

IV. Procedure

A. Processing of Specimens:

See Specimen Processing Procedure QPCMI06003 Vaginitis/Vaginosis Screen

a) Direct Examination:

i. Wet mount: To be set up immediately. Gently press the swab into a drop of sterile saline on a slide. Place a cover slip on the slide and examine under the microscope using the 40X objective. Examine for the presence of Trichomonas vaginalis. Wearing of gloves is required while reading wet mounts.

1. Examine gram-stained slides under oil immersion (x1000).
2. Observe for the presence of the following morphotypes:
   - Large gram-positive bacilli (*Lactobacillus* spp. morphotypes)
   - Small gram-variable bacilli (*Gardnerella* spp. morphotypes)
   - Curved gram-negative or gram-variable bacilli (*Mobiluncus* spp. morphotypes)
3. Quantitate each morphotype according to the following scale:
   1+ = <1 cell per 1000x oil immersion field
   2+ = 1-4 cells per 1000x oil immersion field
   3+ = 5-30 cells per 1000x oil immersion field
   4+ = >30 cells per 1000x oil immersion field
4. Calculate a total numerical score by summing the scores for the three components as indicated in the following table and examples:

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<thead>
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<tbody>
<tr>
<td>0</td>
<td>4+</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>3+</td>
<td>1+</td>
<td>1-2+</td>
</tr>
<tr>
<td>2</td>
<td>2+</td>
<td>2+</td>
<td>3-4+</td>
</tr>
<tr>
<td>3</td>
<td>1+</td>
<td>3+</td>
<td></td>
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<tr>
<td>4</td>
<td>0</td>
<td></td>
<td>4+</td>
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</tbody>
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**Total Nugent Score:**
- 0-3 = Normal
- 4-6 = gram stains shows altered vaginal flora not consistent with bacterial vaginosis.
- 7-10 = Bacterial vaginosis

**Examples:**

1. *Gardnerella* spp. 4+ 4
   *Lactobacilli* spp. 2+ 2
   *Mobiluncus* spp. 2+ 2
   Total score = 8 (Report as Bacterial Vaginosis)

2. *Gardnerella* spp. 2+ 2
   *Lactobacilli* spp. 2+ 2
   *Mobiluncus* spp. 1-2+ 1
   Total score = 5 (Report as altered vaginal flora not consistent with bacterial vaginosis)

3. *Gardnerella* spp. 2+ 2
   *Lactobacilli* spp. 3+ 1
   *Mobiluncus* spp. 3-4+ 2

**Score**
V. Reporting Results

Wet Mount:

Negative Report: “No Trichomonas vaginalis seen.”
The following message will automatically be added to ALL negative reports: “The presence of Trichomonas vaginalis cannot be ruled out if there was a delay in transport and/or processing of this specimen”.

Positive Report: “Trichomonas vaginalis seen.”

Gram Stain (Yeast results):

Negative Report: “No yeast seen”.

Positive Report: “Yeast seen.”

Gram Stain (Bacterial vaginosis results):

Negative Report: “No evidence of bacterial vaginosis seen”.

or
“Altered vaginal flora not consistent with bacterial vaginosis seen.”

For patients <12 and >60 years, TEST COMMENT “Laboratory diagnosis of bacterial vaginosis has not been validated for pre-pubescent and post-menopausal patients; interpretation of such results needs to take this into account.” will be added automatically by the LIS.

VI. References


5. Mandell 5th Editional Principles and Practice of Infectious Diseases