



HEALTH HOLDING

HAFER ALBATIN HEALTH  
CLUSTER  
MATERNITY AND  
CHILDREN HOSPITAL

<b>Department:</b>	Laboratory and Blood Bank (Microbiology)		
<b>Document:</b>	Internal Policy and Procedure		
<b>Title:</b>	Vaginal /Cervical Swab Culture		
<b>Applies To:</b>	All Laboratory Staff		
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## 1. PURPOSE:

- 1.1 To establish system and set responsibilities for processing Vaginal Swab culture.

## 2. DEFINITONS:

- 2.1 **HVS:** High Vaginal Swab

## 3. POLICY:

- 3.1 Swabs from the posterior vaginal vault or cervical orifice are collected and transported in Amie's transport medium.
- 3.2 Specimen should be transported to the laboratory as soon as possible.

## 4. PROCEDURE:

### 4.1 Direct Examination:

#### 4.1.1 Wet preparation (If requested):

- 4.1.1.1 To be set up immediately.
- 4.1.1.2 Gently press the swab into a drop of sterile saline on a slide.
- 4.1.1.3 Place a cover slip on the slide and examine under the microscope using the 40 X objective.
- 4.1.1.4 Examine for the presence of Trichomonas vaginalis.

#### 4.1.2 Gram stain (if requested):

- 4.1.2.1 Examine for the presence of yeast, clue cells and organisms associated with bacterial vaginosis.
- 4.1.2.2 If clue cells are present, this is interpreted as bacterial vaginosis.
- 4.1.2.3 In the absence of clue cells, grade and score the bacterial findings as follows:

#### 4.1.2.3.1 Grading:

<b>1+</b>	= <1 cell per oil immersion field
<b>2+</b>	= 1- 4 cells per oil immersion field
<b>3+</b>	= 5-30 cells per oil immersion field
<b>4+</b>	= >30 cells per oil immersion field

#### 4.1.2.3.2 Scoring:

Score	Lactobacilli	Gardnerella	Mobiluncus
0	4+	0	0
1	3+	1+	(1-2) +
2	2+	2+	(3-4) +
3	1+	3+	
4	0	4+	



**Total score:** > 6 = Bacterial vaginosis 0-5 = Normal

**Score Examples:**

1. Gardnerella 4+, Lactobacilli 2+ Total score = 6 (Report as Bacterial Vaginosis)
2. Gardnerella 2+, Lactobacilli 2+, Mobiluncus (3-4) + Total score = 6 (Report as Bacterial Vaginosis)
3. Gardnerella 2+, Lactobacilli 3+ Mobiluncus 3-4+ Total score = 5 (Report as No Bacterial Vaginosis)

**4.2 Culture:** is routinely done

**4.2.1**

<b>Media:</b>	<b>Incubation:</b>
Blood Agar (BA)	O <sub>2</sub> , 35±2 °C x 48 hours
Chocolate Agar (CHOC)	CO <sub>2</sub> , 35±2 °C x 48 hours
MacConkey Agar (MAC)	O <sub>2</sub> , 35±2 °C x 48 hours
Sabouraud Agar (SD)	O <sub>2</sub> , 30°C x 48 hours.

4.2.1.1 In cases of suspected **toxic shock syndrome**, specimens are to be cultured for *S. aureus*, Group A and Group B streptococci.

**4.2.2 Interpretation of culture:**

4.2.2.1 Examine the BA, CHOC, MAC & SD plates after 24- & 48- hours incubation for streptococcus group A or group B, heavy growth of *Staphylococcus aureus*, gram negative bacilli or *Candida* spp.

4.2.2.2 All significant isolates should be identified.

4.2.2.3 **Note:** few growths of *Staphylococcus aureus* or GNB mixed with other flora is considered as a normal vaginal flora.

**4.3 Susceptibility testing:** Refer to Susceptibility Testing Manual.

**4.4 Reporting Results:**

**4.4.1 Wet Preparation:**

4.4.1.1 Negative Report: "No *Trichomonas vaginalis* seen."

4.4.1.1.1 The following message will be automatically added to ALL negative reports:

4.4.1.1.2 The presence of *Trichomonas vaginalis* cannot be ruled out if there was a delay in transport and/or processing of this specimen".

4.4.1.2 Positive Report: "*Trichomonas vaginalis* seen."

**4.4.2 Gram Stain:**

4.4.2.1 Negative Report: "No yeast or evidence of bacterial vaginosis seen".

4.4.2.2 Positive Report:

4.4.2.2.1 "Yeast present. No evidence of bacterial vaginosis." Or

4.4.2.2.2 "Evidence of bacterial vaginosis seen. No yeast presents." Or

4.4.2.2.3 "Yeast and bacterial vaginosis seen."

**4.4.3 Culture:**

4.4.3.1 Negative Report:

4.4.3.1.1 If toxic shock syndrome suspected: "No *Staphylococcus aureus* or beta-haemolytic streptococcus isolated."

4.4.3.1.2 If vaginal swab is received for gonococci culture, report with comment: "The recommended specimen for *Neisseria gonorrhoea* culture is an endo-cervical swab."

4.4.3.2 Positive Report:

4.4.3.2.1 If toxic shock syndrome requested, Report all significant isolates with appropriate susceptibilities.

4.4.3.2.2 Do not quantitate except *S. aureus*.



## 5. MATERIAL AND EQUIPMENT:

- 5.1 Microbiology Culture Media
- 5.2 Gram Stain Reagents
- 5.3 Microscan Combo Panels/ Vitek2 System ID & AST Cards
- 5.4 Normal saline, Glass slides & Sterile Loops

## 6. RESPONSIBILITIES:

- 6.1 The assigned technician/ technologist for microbiology lab.
- 6.2 The C. pathology Specialist/ Consultant.

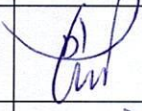



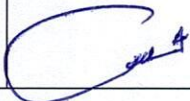
## 7. APPENDICES:

- 7.1 Interpretations for cervical swab

## 8. REFERENCES:

- 8.1 Procedure Manual, Toronto Medical laboratories / Mount Sinai Hospital department of microbiology.
- 8.2 Bailey & Scott's Diagnostic Microbiology. Feingold& Baron; 12th. Ed.2007, C.V. Mosby Co. p. 301.
- 8.3 Clinical Microbiology Procedures Handbook, American Society of Microbiology, Washington DC, 2005.

## 9. APPROVALS:

	Name	Title	Signature	Date
<b>Prepared by:</b>	Dr. Kawther M. Abdou	Consultant & Lab. Medical Director		January 05, 2025
<b>Reviewed by:</b>	Ms. Noora Melfi Alanizi	Laboratory & Blood Bank Director		January 08, 2025
<b>Reviewed by:</b>	Mr. Abdulelah Ayed Al Mutairi	QM&PS Director		January 12, 2025
<b>Reviewed by:</b>	Dr. Tamer Mohamed Naguib	Medical Director		January 13, 2025
<b>Approved by:</b>	Mr. Fahad Hazam Alshammari	Hospital Director		January 20, 2025



### INTERPRETATIONS FOR SERVICAL SWAB

#### I. The recognized agents of cervicitis are:

1. Neisseria gonorrhea (GC)
2. Chlamydia trachomatis (CT)
3. Herpes simplex virus (HSV)

**II. N.B.:** Gram stain is not reliable for the presumptive diagnosis of GC cervicitis because of its low sensitivity and specificity.

#### III. Specimen Collection and Transport:

1. Specimens for GC are collected from the endo-cervical canal using a clean, sterile swab and transported in Amies transport medium.

#### IV. Processing of specimens:

1. Direct Examination: Not indicated.
2. Culture:

Media	Incubation
Chocolate Agar (CHOC)	CO <sub>2</sub> , 35+2 °C x 72 hours
Blood Agar (BA)	O <sub>2</sub> , 35+2 °C x 48 hours
If anaerobic culture is requested add: Blood Agar (BA)	An O <sub>2</sub> , 35+2 °C x 48 hours

#### V. Interpretation of Culture:

1. Examine CHOC plate after 48 and 72 hours incubation for suspect GC, identify the colony by gram stain, oxidase test & NH Vitek ID card.
2. Examine BA plate after 48 for *S. pyogenes* & other B-hemolytic streptococci colonies.
3. Examine anaerobic BA plate after 48 hours for anaerobic growth.

#### VI. Reporting Results:

1. Negative Report: "No Neisseria gonorrhea isolated".
  - If CHOC plate is overgrown by swarming *Proteus* or yeast, report ONLY as "Unable to rule out *N. gonorrhea* due to bacterial/yeast overgrowth."
2. Positive Report: "Neisseria gonorrhea isolated (do not Quantitate)".
  - Inform infection control of all positive GC isolates. Report all significant isolates with appropriate sensitivities.