HEALTH HOLDING

HAFER ALBATIN HEALTH CLUSTER
MATERNITY AND CHILDREN HOSPITAL

Department:	Laboratory and Blood Bank (Microbiology)		
Document:	Internal Policy and Procedure		
Title:	Vaginal /Cervical Swab Culture		
Applies To:	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:**

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

Media:	Incubation:
Blood Agar (BA)	O2,35+2 °C x 48 hours
Chocolate Agar (CHOC)	CO2,35+2 °C x 48 hours
MacConkey Agar (MAC)	O2,35+2 °C x 48 hours
Sabouraud Agar (SD)	O2, 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
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Reviewed by:	Ms. Noora Melfi Alanizi	Laboratory & Blood Bank Director		January 08, 2025
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Appendix 7.1

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)	CO2,35+2 °C x 72 hours
Blood Agar (BA)	O2,35+2 °C x 48 hours
If anaerobic culture is requested add: Blood Agar (BA)	An O2,35+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.