



HEALTH HOLDING

HAFA ALBATIN HEALTH
CLUSTER
MATERNITY AND
CHILDREN HOSPITAL

Department:	Laboratory and Blood Bank (Microbiology)		
Document:	Internal Policy and Procedure		
Title:	Wound Swabs and Drainage Culture		
Applies To:	All Laboratory Staff		
Preparation Date:	January 05, 2025	Index No:	LB-IPP-137
Approval Date:	January 20, 2025	Version :	2
Effective Date:	February 20, 2025	Replacement No.:	LB-IPP-137(1)
Review Date:	February 20, 2028	No. of Pages:	03

1. PURPOSE:

- 1.1 To establish system and set responsibilities for processing wound swabs and drainage culture.

2. DEFINITIONS:

- 2.1 N/A

3. POLICY:

- 3.1 Specimens should be collected using a clean, sterile swab and sent in Amies transport medium. While drainage material should be collected into a clean, sterile container.

4. PROCEDURE:

- 4.1 **Direct examination (Gram stain):** Done from wound swab (without Charcoal) & drainage material. Comment on pus cells and organisms with quantitation.
- 4.2 **Inoculate the following culture media:**

Media:	Incubation:
Blood Agar (BA)	O2,35+2 °C x 48 hours
MacConkey Agar (MAC)	O2,35+2 °C x 48 hours
Chocolate Agar (CHOC)	CO2,35+2 °C x 48 hours
<u>for surgical wound (If requested):</u> Blood/ MacConkey's agar	anaerobic ,35+2 °C x 7 days.

- 4.2.1 Examine the plates after 24- and 48- hours incubation. Examine the anaerobic plates after 48 hours – 1 week for evidence of growth.
- 4.2.2 All isolates are to be identified as appropriate.
- 4.2.3 If no growth on aerobic culture plates but evidence of growth in anaerobic media then perform Gram stain and identify as appropriate.
- 4.3 **Interpretation of Culture:**
- 4.3.1 Growth of 3 types of coliforms or other Gram-negative bacilli will be reported as a negative report stating commensal flora including mixed Gram-negative bacilli".
- 4.3.2 Bite wounds:
- 4.3.2.1 Any growth of *S. aureus*, *Pasteurella* spp., *Strept. milleri* group, beta-hemolytic streptococci and *Pseudomonas aeruginosa* is significant.
- 4.3.2.2 For other organisms such as Enterobacteriaceae and other Gram-negative bacilli, a significant result is determined by the isolation of a moderate to heavy predominant growth, or if growth correlates with the predominant organism seen on Gram stain.
- 4.4 **Susceptibility Testing:** Refer to Susceptibility Testing Manual.
- 4.5 **Reporting Results:**
- 4.5.1 Negative report: "No growth" or "Commensal flora" "Commensal flora including mixed Gram-

negative bacilli".

4.5.2 Positive report: Report all significant isolates with appropriate sensitivities.

5. MATERIAL AND EQUIPMENT:

- 5.1 Routine culture media
- 5.2 Gram stain reagents
- 5.3 O2 & CO2 incubators
- 5.4 Microscan panels/ Vitek 2 system ID & AST cards
- 5.5 Anaerobic system (Jar & sachet)

6. RESPONSIBILITIES:

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

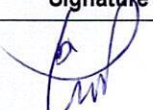



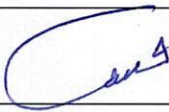
7. APPENDICES:

- 7.1 Organisms encountered in postoperative wound infections

8. REFERENCES:

- 8.1 Procedure Manual, Toronto Medical laboratories / Mount Sinai Hospital department of microbiology.
- 8.2 Bailey & Scott's Diagnostic Microbiology. Feingold & Baron; 7th. Ed., C.V. Mosby Co. p. 301.
- 8.3 H.D. Isenberg. 2004. Specimen Collection, Transport and Acceptability p. 2.1.1 – 2.1.28. In Clinical Microbiology Procedures handbook, 2nd Edition, Vol 1 ASM Press, Washington, D.C.
- 8.4 H.D. Isenberg, 2004. Wound Cultures - Wound and Soft Tissue Cultures, p. 3.13.1.1 – 3.13.1.16. In Clinical Microbiology Procedures Handbook, 2nd Edition, Vol 1 ASM Press, Washington, D.C.
- 8.5 H.D. Isenberg. 2004. Culture for anaerobes p. 4.3.1 - 4.3.9 In Clinical Microbiology Procedures Handbook, 2nd Edition, Vol 1 ASM Press, Washington, D.C.

9. APPROVALS:

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

Appendix 7.1

ORGANISMS ENCOUNTERED IN POSTOPERATIVE WOUND INFECTIONS

1. *Staphylococcus aureus*.
2. Coagulase negative staphylococci.
3. *Streptococcus pyogenes*.
4. *Streptococcus milleri* group.
5. Microaerobic *Streptococci*.
6. Enterococci: *Proteus*, *Morganella*, *Providencia*.
7. Other Enterobacteriaceae: *E.coli*, *Pseudomonas* spp.
8. *Candida* spp.
9. *Bacteroid* spp.
10. *Prevotella* & *porphyromonas* spp.
11. *Fusobacterium* spp.
12. *Clostridium* spp.
13. *Peptostreptococcus* spp.
14. Non spore forming bacilli, anaerobic, Gram positive rods