

Department:	Laboratory and Blood Bank (Microbiology)		
Document:	Internal Policy and Procedures		
Title:	Pus and Abscess Material Culture		
Applies To:	All Laboratory Staff		
Preparation Date:	January 06, 2025	Index No:	LB-IPP-129
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1. PURPOSE:

1.1 To establish system and set responsibilities for processing Pus & Abscess Material Culture.

2. DEFINITONS:

2.1 N/A

3. POLICY:

3.1 Pus from an abscess should be sent in a clean, sterile container.
 3.2 An aspirate of pus or abscess material may be collected using a syringe and sent to the laboratory with the needle removed.
 3.3 If a delay in transport or processing is anticipated, keep the specimen at 4°C.

4. PROCEDURE:

4.1 Processing of Specimens:

4.1.1 Direct Gram stain - Quantitate the presence of pus cells and organisms.
 4.1.2 Modified acid-fast stain - If Actinomyces or Nocardia is requested or suggested on Gram stain.
 4.1.3 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
Blood/ MacConkey's agar	AnO2 ,35+2 °C x 48 hours
Thioglycolate broth (if available)	O2,35+2 °C x 5 days
<u>If fungus culture is requested, add:</u>	O2, 30°C x 3 weeks
Sabouraud Agar (SD)	

N.B.: Inoculate Bl. Culture container with pus or aspirate & load in the corresponding instrument.

4.1.4 If Actinomyces is requested, anaerobic media are to be incubated for 7 days.
 4.1.5 Interpretation of Cultures:
 4.1.5.1 Examine the aerobic culture plates after 24- and 48-hours incubation and the anaerobic plates after 48 hours and 7 days incubation (if Actinomyces requested or suggested on Gram stain).
 4.1.5.2 Examine the THIO daily for evidence of growth. If no growth on culture plates but evidence of growth in THIO, then perform Gram stain and subculture THIO onto BA, MAC, CHOC and BA (anaerobic) and incubate and process as above.
 4.1.5.3 All isolates should be identified.
 4.1.6 Susceptibility Testing: Refer to Susceptibility Testing Manual.

4.2 Reporting Results:

- 4.2.1 Gram stain: Report with quantitation the presence of pus cells and organisms.
- 4.2.2 Culture:
 - 4.2.2.1 Negative report: "No growth after 48 hours incubation"
 - 4.2.2.2 If Actinomyces is requested, report: "No Actinomyces isolated after 7 days incubation".
 - 4.2.2.3 Positive report: Report 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)
- 5.6 Routine culture media

6. RESPONSIBILITIES:

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

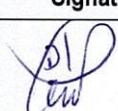
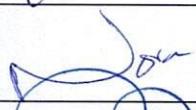
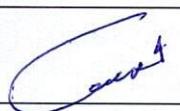
7. APPENDICES:

- 7.1 N/A

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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