

Wound Culture (Aerobic, Gram Stain)

Information Sheet

Overview

MDL Test Name

Wound Culture – Aerobic, Gram Stain

MDL Test Code

WNDA_CULT

Ask at Order Questions

Was the wound specimen collected during surgery?

Specimen Source

Wound (specify source/site)

Specimen Requirements

Container/Tube

- ESwab - all swab collections
- Sterile Container - all aspirations/drainage

Specimen Volume (minimum)

- ESwab
 - N/A (swab specimen)
 - Must have swab present in container
- Sterile Container
 - 0.5mL

Sample Stability Time

48 hours

Transport/Storage Conditions

- Refrigerated (2 – 8°C)
- Ambient (20 – 25°C)

Patient Preparation / Collection Instructions

- Cleanse skin or mucosal surfaces. For closed wounds and aspirates, disinfect as for a blood culture collection with 2% chlorhexidine or 70% alcohol followed by an iodine solution. Remove iodine with alcohol prior to specimen collection. For open wounds, debride (if appropriate), and thoroughly rinse with sterile saline prior to collection. Sample viable infected tissue, rather than superficial debris.
- Gently roll the swab over the wound's surface approximately five times, focusing on the area where there is evidence of pus or inflamed tissue. Abscesses that are closed off and not yet draining externally should be aspirated and the pus (purulent fluid) sent for culture. Aspirate infected material with a needle and syringe.
- Drainage fluids for culture should not be collected from the bag (due to organism overgrowth), it should be collected by direct aspiration of fluid from the area being drained or by aspiration of fresh fluid in the drainage tube after decontaminating the surface of the device.

Performance

Days Performed

Daily; Monday – Sunday

Report Available (TAT) – (Once received at MDL)

4 – 5 days

Specimen Retention Time

7 days

Method Description

- Conventional aerobic bacterial culture technique with selective and non-selective media.
- Identification methods (when appropriate) may include any of the following: conventional biochemical testing, matrix-assisted laser desorption/ionization time-of-flight (MALDI-TOF) mass spectrometry, and commercial identification panels.
- Susceptibility testing (when appropriate) may include minimal inhibitory concentration (MIC) (broth microdilution or gradient strip diffusion) or disk diffusion.

Reference Values

No growth of pathogens.

Cautions

- Antibiotics administered prior to sample collection may negatively affect the recovery of organisms associated with infection. Preferably collect specimen prior to initiation of therapy and only from wounds that are clinically infected or deteriorating or that fail to heal over a long period.
- Many wound infections are polymicrobial and the isolation of an organism in culture may or may not correlate with infection of the wound.