

Tissue Culture Information Sheet

Overview

MDL Test Name

Tissue Culture – Aerobic, Anaerobic, Gram Stain

MDL Test Code

TSS_CULT

Ask at Order Questions

N/A

Specimen Source

Tissue (specify site)

Specimen Requirements

Container/Tube

- Sterile Container
- NOTE: If the collector is concerned about the tissue sample drying out, sterile saline can be added to a sterile gauze to keep the container moist.

Specimen Volume (minimum)

~3 – 4 mm

Sample Stability Time

48 hours

Transport/Storage Conditions

Ambient (20 – 25°C); maintain at room temperature

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.
- Tissue biopsies should be collected from areas within and adjacent to the area of infection. (large enough tissue samples should be collected to perform all of the tests requested)

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 and anaerobic 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.

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.