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Stool Culture with Shiga Toxin Test Information Sheet

Overview

MDL Test Name

Stool Culture with Shiga Toxin Test

MDL Test Code

ST_CULT

Ask at Order Questions

N/A

Specimen Source

Stool or Rectal Swab

Specimen Requirements

Container/Tube

FecalSwab

Specimen Volume (minimum)

- N/A (swab specimen)
- Must have swab present in container

Sample Stability Time

- 72 hours if refrigerated (Preferred)
- 48 hours if ambient

Transport/Storage Conditions

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

Patient Preparation / Collection Instructions

- The patient should be cautioned against the use of antacids, barium, bismuth, anti-diarrheal medication, antibiotics, histamine, nonsteroidal anti-inflammatory drug, or oily laxatives prior to collection of the specimen.
- Refer to WSU MDL FecalSwab Collection Guide

Performance

Days Performed

Daily; Sunday – Monday

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

3 – 5 days

Specimen Retention Time

7 days

Method Description

- **Culture**
  - 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.
- **Shiga Toxin**: Rapid Membrane Enzyme Immunoassay

Reference Values

- Culture: No growth of Salmonella, Shigella, or Campylobacter
- Shiga Toxin: No Shiga toxins detected

Cautions

- **Note**: MDL performs a Shiga Toxin Test with each stool culture order.
- A negative shiga toxin result does not preclude the possibility of the presence of shiga toxins in the specimen which may occur if the level of antigen is below the detection limit of the test. (cutoff for Shiga Toxin QuiK Chek established at concentrations of 0.04 ng/mL Stx1 and 0.04 ng/mL Stx2).
- Toxin produced by Shigella dysenteriae is nearly identical to the Stx1 produced by E. coli, and if present at detectable levels, will give a positive result of Stx1.
- This culture screens for Salmonella, Shigella, and Campylobacter. Vibrio and Yersinia require specific media and incubation conditions for growth, if found they will be reported, but these are not routinely covered by this order.
- Fresh stool samples will not be accepted.
- Diapers will not be accepted.

WSU Molecular Diagnostics
mdlsupport@wichita.edu
(316) 978-8600