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Upper Respiratory Culture Information Sheet

Overview

MDL Test Name

Upper Respiratory Culture

MDL Test Code

UR_CULT

Ask at Order Questions

N/A

Specimen Source

- Throat swab
- Oropharyngeal swab
- Nasal swab
- Nasopharynx swab

Specimen Requirements

Container/Tube

ESwab

Specimen Volume (minimum)

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

Sample Stability Time

48 hours

Transport/Storage Conditions

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

Patient Preparation / Collection Instructions

Refer to the following MDL guides on MDL's website:

- Nares Swab Collection
- Oropharyngeal (Throat) Swab Collection
- Nasopharyngeal Swab Collection
- WSU MDL ESwab General Collection Guide

Performance

Days Performed

Daily; Monday – Sunday

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

3 – 4 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 pathogens isolated.
- Normal Respiratory Flora isolated.
    - Normal respiratory flora includes:
        - Viridans Streptococci
        - nonpathogenic Neisseria
        - diphtheroids
        - coagulase-negative Staphylococcus
        - Rothia

- Group F Streptococcus
- Anaerobes
- Haemophilus species (not influenzae)
- Eikenella
- Actinobacillus
- Capnocytophaga
- Morexella
- Enterococci
- Yeasts (not Cryptococcus)
- Insignificant numbers of *S. aureus*, gram-negative rods, and *N. meningitidis*

Cautions

- Specimens from the upper respiratory tract can be easily obtained but are always contaminated with resident microbiota. Many microorganisms present in the nares and throat are found in both the disease and the carrier states.
- Culture of nasopharyngeal specimens to detect carriage of potential pathogens such as *Neisseria meningitidis*, *S. pneumoniae*, and *H. influenzae* should be discouraged. Since these pathogens are all part of the normal oropharyngeal flora, the clinical relevance of culturing them from this site cannot be determined.
- Upper respiratory cultures should be done when detection of a specific pathogen is sought and not be performed routinely to detect any organism that is present.

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