Lab Dept: Microbiology

Test Name: YEAST ONLY CULTURE AND GRAM STAIN

General Information

Lab Order Codes: STLY

Synonyms: Culture, Yeast Only

CPT Codes: 87102 – Culture, fungi isolation, with presumptive identification of

isolates; other source except blood

87106 – Culture, fungi definitive identification, each organism; yeast 87205 – Smear, primary source with interpretation; Gram or Giemsa

stain for bacteria, fungi or cell types

Test Includes: Culture for Candida and other yeasts and Gram stain.

Logistics

Lab Testing Sections: Microbiology

Phone Numbers: MIN Lab: 612-813-5866

STP Lab: 651-220-6555

Test Availability: Daily, 24 hours

Turnaround Time: Preliminary report available at 1 day, final report within 5 days.

Special Instructions: Specimen site and date/time of collection are required for specimen

processing.

Specimen

Specimen Type: Throat, fresh random stool or rectal swab, skin, urine, vagina or other

sources in which yeast may be suspected.

Container: Sterile container or swab transport system;

White top, Liquid Stuart (CHC #359) or

- Red top double swab, Liquid Stuart (CHC #19092)
- Plastic, leak-proof container for urine or stool specimens or
- Para-Pak® C&S system for stool specimens with delayed transport of more than 1 hour
 - Available from Materials, Storeroom Item# 9976).

Volume: 2 grams, 2 mL or swab

Collection: Fresh Stool:

Onsite collections ONLY:

- **1.** Collect fresh, diarrheal stool in a clean, dry bedpan or on a newspaper over the toilet. Do not contaminate with urine, residual soap or disinfectants.
- 2. Transfer to a plastic, leak-proof container.
- **3.** Specimens in diapers are not acceptable. Pediatric patients with severe diarrhea may use a U bag collection system. Place the bag over the anal area in an attempt to retrieve the specimen before it soaks into the diaper. The diaper can also be reversed with the plastic side toward the skin to prevent the specimen from soaking into the diaper. Transfer specimen into a plastic, leak-proof container.
- **4.** If there is a delay in transport of more than 1 hour, preserve specimen using the Para-Pak® (C&S) system. Refer to Special Processing.

Rectal Swab:

- 1. Insert swab approximately 1 inch into anal canal.
- 2. Gently move the swab from side to side to sample the anal crypts.
- 3. Feces should be evident on the swab.
- 4. Place swab in culturette.

Skin:

- 1. Gently swab affected area or active border of a lesion.
- 2. Place swab in culturette.

Urine:

- 1. Submit a catheterized specimen (2 10 mL).
- 2. Collect early-morning specimen in a sterile container.
- 3. 24 hour specimens are unacceptable.

Vaginal swab:

- **1.** Wipe away excessive amount of secretion or discharge.
- Obtain secretions from mucosal membrane of the vaginal vault with a sterile swab.
- 3. If smear is also requested, collect a second swab.
- 4. Place swab in culturette.

Special Processing:

Instructions for Para-Pak® (C&S) system for stool when delayed transport >1 hour is expected:

- 1. Fill vial by using the spoon built into the lid of the vial and transferring small scoopfuls of stool from areas which appear bloody, slimy or watery until the contents rise to the "Fill Here" red line. **Do not overfill**.
- **2.** If the stool is formed, sample small amounts from each end, sides and the middle.
- **3.** Mix the contents of the vials with the spoon. Screw cap on **tightly** and shake the vial vigorously until the contents are well mixed. Make sure there is no leakage.
- **4.** Label vials with patient's name, date and time of collection.
- **5.** Store vials at room temperature.
- **6.** Return collection kit to laboratory within 72 hours.

Transport/Storage:

Onsite collections: Transport to the laboratory immediately.

Offsite collections: Refrigerate swab and urine specimens. Do not refrigerate Para-Pak® (C&S) vials. Specimens must be promptly transported to the laboratory, with the next available courier, not to exceed 24 hours from the time of collection. However, delayed transport causes a delay of test results.

Sample Rejection:

No diapers accepted. Unpreserved, fresh specimens with a transit time exceeding 2 hours after collection; multiple specimens received on same day; improperly labeled specimen; stool specimen contaminated with urine and/or water; specimen containing interfering substances such as castor oil, bismuth, Metamucil®, barium, Vaseline®, or other cream contaminants. Specimens with prolonged transit time (see Transport/Storage for requirements) If an unacceptable specimen is received, the physician or nursing station will be notified and another specimen will be requested before the specimen is discarded.

Interpretive

Reference Range: No yeast isolated after 5 days or Yeast not in a 2:1 ratio to normal stool

flora.

Critical Value: Isolation of Cryptococcus neoformans, Coccidioides immitis,

Histoplasma capsulatum, Blastomyces dermatitidis, Sporothrix schenkii, and other fungi in significant body sites and clinical situations. The physician or patient's nurse will be notified of any yeast or mold isolated

from a sterile body site or a systemic infection.

Additional Information: Overgrowth of yeast is frequent in patients on antibiotics and/or

immunosuppressive agents. In compromised patients, this increases the risk of invasive disease. Low numbers of yeast can be seen as part

of normal flora.

Methodology: Culture

References:

Cook, JH, and M Pezzlo (1992). Specimen receipt and accessioning. Section 1. Aerobic bacteriology, 1.2.1-4. In HD Isenberg (ed) Clinical Microbiology Procedures Handbook. American Society for Microbiology, Washington DC

Miller, J Michael (1999) A Guide To Specimen Management in Clinical Microbiology, American Society for Microbiology, Washington DC

Miller, J Michael, and HT Holmes (1999) Specimen Collection, Transport, and Storage In PR Murray et al, (ed), Manual of Clinical Microbiology, 7th edition, American Society for Microbiology, Washington DC, pp 33-104

Updates:

6/20/2012: Critical value added

11/18/2013: Urine added as an acceptable specimen.

11/20/2014: Offsite information added.