Mycology Supplemental Information

Until relatively recent times mycology cultures were performed only in a few cases. It was sufficient to determine that a person had a pathogenic fungus and to identify that pathogen. Most other mycology cultures were reported as "No pathogenic fungi isolated." Other fungi, even if identified, were designated as saprophytes.

Today many persons are immunocompromised or immunosuppressed. Persons with diabetes who have become ketonic, cancer patients who are receiving chemotherapy, transplant recipients who must take immunosuppressive drugs, and persons who have developed AIDS are likely at some time to develop fungal diseases.

With any of these persons, mycoses can develop rapidly. Along with diseases caused by the common pathogens, it has become increasingly evident that many organisms formerly considered to be saprophytes are causing serious and in some cases life-threatening disease processes in these immunocompromised individuals.

Reference cultures of isolates are accepted for the identification of yeast and cutaneous, subcutaneous, and systemic fungi.

Yeasts are identified on characteristic microscopic morphology on selected media and by their assimilation of carbohydrates in the API 20 C assimilation kit. Fungi are identified by their growth rate, the size and color of the hyphae, and by the arrangement and origin of the conidia they produce. Biochemical tests are used if appropriate.

The Mycology Section identifies aerobic actinomycetes and fungus-like bacteria. They are identified primarily by biochemical tests.

Antimicrobial testing is not performed in this laboratory.

Specimen Collection

To submit reference cultures, subculture isolated colonies from primary culture media to fresh media and incubate until visible growth appears. Fungal and yeast cultures may be shipped in screw-capped tubes of Sabouraud's agar or other appropriate media. Seal tightly with parafilm or waterproof tape. Plates are acceptable only if they are sealed and placed in a biohazard plastic bag.

Specimen Identification

1. Complete **all** the provider and patient information areas. Include pertinent clinical information with each specimen.

2. Label each specimen with the date of collection and the patient's first and last name. Unlabeled specimens or specimens where the patient identifier on the specimen does not match the identifier on the form will not be tested.

Reporting and Interpretation of Results

Clinical specimens are reported within 6 weeks.

Organisms are reported using the genus and species designations consistent with descriptions in the American Society for Microbiology's *Manual of Clinical Microbiology* and Davise Larone's *Medically Important Fungi: A Guide to Identification.*

For molds, if no conidia are formed after 4 weeks and sporulation cannot be induced, the culture is reported as Mycelia Sterilia (fungi that do not form conidia or spores) or Hyaline fungus no sporulation.

The results of all specimens are reported to the health care provider who submitted the specimen.

Criteria for Unacceptable Specimens

All Specimens

1. The specimen was not properly identified with the patient's name or identifier.
2. The patient identifier on the specimen does not match the identifier on the form.
3. The specimen was broken in transit.
4. The specimen was non-viable.
5. A mixed specimen was submitted.
6. The specimen did not arrive in appropriate temperature transport range. (2-8°C)