

***Candida tropicalis* in biliary secretions in a patient with acute intestinal obstruction due to gangrenous bowels**

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Abstract

Candida is a ubiquitous fungus and can lead to various forms of infections like superficial, subcutaneous and systemic-to- invasive infections. Lower gastrointestinal tract infections caused by *Candida* species are rarely reported and *Candida albicans* is the most common species that has been identified. Here, we report a rare case of acute intestinal obstruction in a 58-year-old male patient where bile secretions yielded growth of *Candida tropicalis*.

Keywords: Acute intestinal obstruction, Bile, *Candida tropicalis*

Introduction

Lower gastrointestinal tract infections caused by *Candida* species are rarely described. *Candida* peritonitis is usually a disease of critically ill surgical patients. Bolt et al, (2007). Isolation of fungus from biliary secretions is an uncommon event Cleophas et al, (2000) and the clinical significance is unknown. Here we present a case of acute intestinal obstruction where *Candida tropicalis* was isolated from biliary secretions.

Case report

A 58-year-old man presented with abdominal pain and distention and severe constipation and was admitted for a suspected diagnosis of an intestinal obstruction. On examination the abdomen was firm with diffuse tenderness, bowel sounds were absent with free fluid in the abdomen. Explorative laparotomy was

performed. An intraoperative examination revealed gangrenous ascending, transverse and descending colon, bowel resection and ileostomy was done. Biliary secretions sent to the microbiology lab showed budding yeast cells with pseudohyphae on Gram stain and *Candida tropicalis* was isolated from cultures.(Fig.1) Blood cultures were sterile Injection amphotericin was added to the antibiotic regime but the patient developed sudden unresponsiveness and died of cardiac arrest.

Discussion

C. tropicalis is an organism that can be found in the environment and also as an opportunistic human pathogen. It has been reported to colonize at several sites in the body including the skin, gastrointestinal, genitourinary and respiratory tracts. Negri et al, (2010). It can be acquired endogenously in patients who are immunocompromised,

including those admitted to an intensive care unit, suffering from malignancy, requiring prolonged catheterization, receiving broad-spectrum antibiotics and those with neutropenia. Kontoyiannis et al, (2001).

Fig. 1

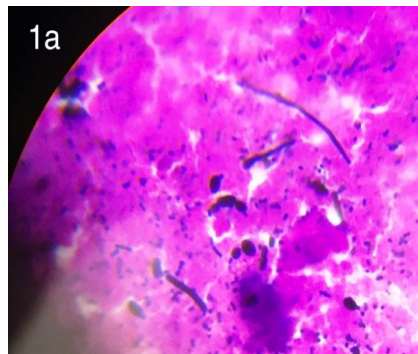


Fig. 1a: Gram stain picture showing blastospores with pseudohyphae.

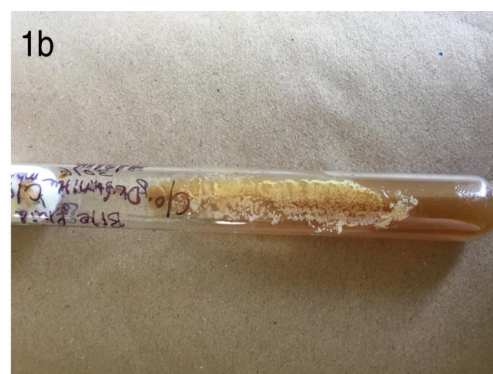


Fig. 1b: Growth on Sabouraud's dextrose agar.

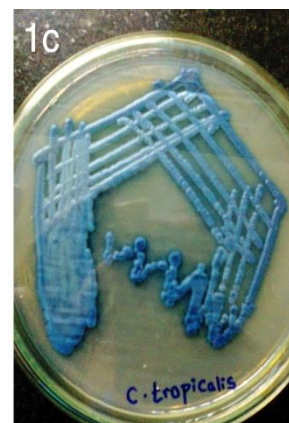


Fig. 1c: Growth on Corn meal agar.

Alternatively, it can be acquired exogenously by direct contact (Nucci and Colombo, 2007).

Candida peritonitis is still associated with poor prognosis. The clinical and microbiological diagnosis of *Candida* peritonitis remains problematic. It is still unclear which peritonitis patients may benefit from antifungal treatment. Antifungal therapy can be suggested in critically ill patients with nosocomial peritonitis where *Candida* is diagnosed based on perioperatively sampled peritoneal fluid.

Conclusion

The main challenge in *Candida* peritonitis remains interpretation of *Candida* cultured from the peritoneal cavity. While awaiting progress to discriminate *Candida* colonization from invasive infection, antifungal therapy is recommended in high-risk critically ill surgical patients. Rapid detection of *Candida* might be beneficial in this regard. Besides antifungal therapy, adequate source control is of key importance.

Conflict of interest: None declared

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