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## CASE REPORT

### *Candida albicans* SKIN ABSCESS

Felipe Francisco TUON(1) & Antonio Carlos NICODEMO(1)

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#### SUMMARY

Subcutaneous candidal abscess is a very rare infection even in immunocompromised patients. Some cases are reported when breakdown in the skin occurs, as bacterial cellulites or abscess, iatrogenic procedures, trauma and parenteral substance abuse. We describe a case of *Candida albicans* subcutaneous abscess without fungemia, which can be associated with central venous catheter.

**KEYWORDS:** *Candida albicans*; Subcutaneous abscess; Fungemia.

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#### INTRODUCTION

Candidal infection of subcutaneous tissue may result from direct contact, inoculation injury or hematogenous spread<sup>1</sup>. In some patients, skin lesions may be the only sign of a systemic fungal infection, and prompt recognition of these lesions may facilitate early diagnosis and treatment. We report a case of isolated *Candida albicans* skin abscess in a critical ill patient.

#### CASE REPORT

A 32-year-old white man with tuberculous bowel perforation was admitted after surgery in the intensive care unit with severe sepsis. After recovery of organ failures, a short bowel syndrome developed and the patient needed parental nutrition for a long time. He stayed in the hospital for three months due to surgical wound infection, blood stream infection, pneumonia and catheter associated fungemia by *Candida albicans* which was treated with endovenous fluconazol. Since the hospitalization, he received various broad spectrum antibiotics, continued parenteral nutrition and malnutrition developed. Four months after admission, when all the infections were treated, he developed a firm subcutaneous swelling over the left lower thoracic wall with 4.5 cm in diameter, with normal overlying skin. The patient had no other symptoms or signs. Oropharyngeal candidiasis or dysphagia was absent. Chest X-ray was better than previous images. Blood cultures were negative. Needle aspiration was done and *Candida albicans* was cultured. No bacteria were isolated in aerobic or anaerobic cultures. No other foci of fungal infection were detected, central venous catheter was removed and intravenous fluconazol was initiated. A semiquantitative culture of central venous catheter was negative. A

surgical debridement of abscess was realized and the patient was discharged after 14 days of fluconazol therapy without other lesions.

#### DISCUSSION

Subcutaneous candidal abscess is a very rare occurrence in the absence of any apparent sign of disseminated or focal visceral disease<sup>4</sup>. A macronodular cutaneous lesion occurs in 10% of cases of disseminated candidiasis occurring in neutropenic patients, but not subcutaneous nodule with normal overlying skin<sup>1</sup>. In a review of 375 fungal isolations *C. albicans* was recovered from pus in one patient<sup>5,8</sup>. Subcutaneous candidiasis has been described only in patients with other underlying diseases or lesions of the skin, bacterial cellulites or abscess, granulomatous panniculitis with multiple nodules and ulcers<sup>2,3,7</sup>. Furthermore, penetration of *Candida* may follow iatrogenic procedures, trauma and parenteral substance abuse<sup>6</sup>. The site of abscess, in our case, was far (lower thoracic wall) from common sites of applications and no break of skin integrity was present. Although blood and catheter cultures remained negative for *Candida* throughout the course and no other focus of infection was found, we cannot exclude hematogenous seeding, although a quantitative culture of catheter was not performed. When excluding an inoculation injury, hematogenous spread from mucosal, intestinal, visceral or catheter localizations may be probably, occurring even after complete disappearance of primary foci of infection, or in association with clinically silent colonization<sup>1</sup>. In conclusion, a subcutaneous abscess due to *Candida albicans* is rare, even in patients with classic risk factors. Treatment can be done with drainage, systemic antifungal and removal of invasive devices which could maintain a continuous source of fungemia.

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(1) Department of Infectious and Parasitic Diseases, School of Medicine/University of São Paulo, São Paulo, SP, Brazil.

**Correspondence to:** Antonio Carlos Nicodemo, Departamento de Moléstias Infecciosas e Parasitárias (4º andar) sala 4028/4029, Hospital das Clínicas/Fac. Medicina/USP, Av. Dr. Enéas de Carvalho Aguiar 255, 05403-000 São Paulo, SP, Brasil. Phone: 55 11 30696530, Fax: 55 11 30697508. E-mail: ac\_nicodemo@uol.com.br

### Abscesso de pele por *Candida albicans*

Abscesso subcutâneo por *Candida* é infecção muito rara mesmo em pacientes imunocomprometidos. Alguns casos são relatados quando ocorre dano na pele, como celulite bacteriana ou abscesso, procedimentos iatrogênicos, trauma e abuso de substância parenteral. Relatamos caso de abscesso subcutâneo por *Candida albicans* sem fungemia, que pode estar associado com cateter venoso central.

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