

# Cutaneous cryptococcosis

N. Quartarolo, I. Thomas, H. Li, M. Wiederkehr, R. A. Schwartz and W. C. Lambert

---

## SUMMARY

Cutaneous cryptococcosis, caused by the encapsulated yeast, *Cryptococcus neoformans*, is generally associated with concomitant systemic infection. The authors report a case of a man with isolated cutaneous cryptococcosis of his right foot without obvious systemic manifestations. A review of the clinical aspects, pathogenesis and management of cutaneous cryptococcosis is also presented.

---

## Introduction

Cryptococcosis is a systemic infection caused by the encapsulated yeast, *Cryptococcus neoformans*. Cryptococcus is ubiquitously found in the soil, in pigeon droppings and in their nesting places. In the non-human environment it is not encapsulated and measures less than 2  $\mu\text{m}$ . Its usual route of entry into humans is via inhalation of this non- or poorly encapsulated form of the organism. In the lungs, the organism develops its polysaccharide capsule, which is responsible for most of its virulence. Even though the lungs are the site of inoculation, pulmonary infection, even in the immunocompromised, tends to be asymptomatic. Immunocompetent hosts tend to remain asymptomatic, but reactivation or spread to the lymph nodes, blood, central nervous system and any other tissue may occur in immunosuppressed individuals or those with low CD4 counts. (1,2,3)

The most common manifestation of disseminated cryptococcosis is infection of the central nervous system, which produces meningitis or encephalitis. However, systemic spread can cause almost any organ to become infected. The skin is the most common extraneural site of infection, affecting 10-20% of those with systemic involvement. (2) Cutaneous lesions are an ominous sign as they are often the first presenting symptom of systemic disease. However, rare cases of primary inoculated cutaneous lesions, without evidence of disseminated disease, have been reported.

## Case report

A 48-year-old male presented with a 1 month history of an enlarging nodule on his right foot near the

## KEY WORDS

cryptococcosis,  
cutaneous,  
foot,  
male patient,  
positive  
histopathology

