

## Case Report

# Cryptococcal infection in a post renal transplant patient presenting as a cutaneous nodule

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DOI: <http://doi.org/10.4038/jdp.v11i2.7697>

Submitted on 27.11.2016 Accepted for publication on 18.12.2016

## Introduction

*Cryptococcus neoformans* is an encapsulated fungus capable of causing life threatening opportunistic infections in immunocompromised patients. It has a worldwide distribution and is most commonly found in bird droppings and contaminated soil.

Risk factors for acquiring cryptococcosis include HIV infection, solid organ transplantation (SOT) and other forms of innate and acquired immunosuppression (1). Infection is usually acquired by inhalation of dehydrated yeasts or basidiospores leading to the establishment of a primary pulmonary infection (2). Subsequent to initial infection or reactivation, there can be haematogenous dissemination preferentially to the central nervous system (CNS) and a variety of other organs like skin, soft tissue and bone, depending on the immune status of the host (3). Immunocompetent patients can be asymptomatic or have limited pulmonary disease, while immunocompromised patients tend to have disseminated disease with frequent CNS involvement and a fatal outcome.

Notably in the past decade or so, there has been a shift in the type, presentation and incidence of opportunistic infections

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worldwide. This has been partly due to the expansion of the 'at-risk population' as a result of both newer therapeutic modalities such as transplantation and immunosuppression coupled with advances in life support, enabling longer survival of debilitated patients. In Sri Lanka too, where organ transplantation is becoming commoner, it is imperative that physicians, radiologists, microbiologists and pathologists become aware of these changing patterns of disease.

The first case of cryptococcosis diagnosed and confirmed in Sri Lanka was reported by Jayewardena et al. in 1963 in the central nervous system (4). Thereafter published reports of cryptococcosis are sparse and limited to isolated case reports. However, recent estimates extrapolated from unpublished data from the Medical Research Institute indicate an estimated annual national case-load of 13 cases (5).

We describe a case of cryptococcosis with central nervous system and skin involvement, in a patient on immunosuppression following a kidney transplant five years prior.

## Case report

### Clinical history

A 63-year-old man who had undergone renal transplant 5 years back, presented with nausea and vomiting of 3 days duration. He had headache, hearing impairment, vertigo and a cough for three weeks. He was on