

Detection and antifungal susceptibility testing of oral *Candida dubliniensis* from human immunodeficiency virus-infected patients

Sneha K. Chunchanur, Shobha D. Nadgir², L. H. Halesh², B. S. Patil¹, Yasmeen Kausar³,
M. R. Chandrasekhar⁴

Departments of Microbiology and ¹Medicine, SDM College of Medical Sciences and Hospital, Dharwad-580 009,
²Department of Microbiology, Karnataka Institute of Medical Sciences, Hubli- 580022, ³Al Ameen Medical College,
Bijapur- 586108, ⁴Raichur Institute of Medical Sciences, Raichur- 584102, India

Address for correspondence:

Dr. Sneha. K. Chunchanur, Department of Microbiology, SDM College of Medical Sciences and Hospital, Dharwad-580009, Karnataka, India. E-mail: drsneha_kc@yahoo.co.in

ABSTRACT

Context: *Candida dubliniensis*, an opportunistic yeast that has been implicated in oropharyngeal candidiasis (OPC) in patients infected with Human Immunodeficiency Virus (HIV) may be under-reported due to its similarity with *Candida albicans*. Resistance to Fluconazole is often seen in *C. dubliniensis* isolates from clinical specimens. **Aims:** To know the prevalence of *C. dubliniensis* in OPC in patients infected with HIV and their antifungal susceptibility pattern. **Settings and Design:** One hundred and thirty-two HIV seropositive individuals and 50 healthy controls were included in the study. **Materials and Methods:** Two oral swabs were collected from the site of the lesion from 132 HIV-infected patients. Oral rinse was obtained from 50 healthy controls. Samples were inoculated on Sabouraud's dextrose agar (SDA) medium and on HiCrome *Candida* Differential Agar (CHROM agar) medium. Isolates were speciated by standard tests. Dark green-colored, germ tube positive isolates, which failed to grow at 42°C and negative for xylose assimilation were identified as *C. dubliniensis*. Antifungal susceptibility test was performed by Macro broth dilution technique (National Committee for Clinical Laboratory Standards guidelines). **Results and Conclusions:** From 132 patients, 22 (16.3%) *C. dubliniensis* were isolated; samples from healthy controls did not reveal their presence. Antifungal susceptibility test showed higher resistance among *C. dubliniensis* isolates to azoles compared to *C. albicans*. Five (22.7%) isolates of *C. dubliniensis* were resistant to Fluconazole followed by four (18.2%) to Ketoconazole. This study emphasizes the importance of identification and antifungal susceptibility testing of *C. dubliniensis* in HIV-infected patients.

KEY WORDS: Antifungal susceptibility testing, *C. dubliniensis*, human immunodeficiency virus, oropharyngeal candidiasis

DOI: 10.4103/0377-4929.56138