PREVALENCE SPECIES AND FLUCONAZOLE SENSIBILITY PROFILE OF CANDIDA SPP. CLINICAL ISOLATES
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INTRODUCTION AND OBJECTIVES: Candidiasis has become an important public health concern due to increasing numbers of immunocompromised patients; restricted therapeutic arsenal of antifungals; and the emergence of antifungal resistance in Candida spp. isolates, mainly due to the overexpression of efflux pumps. Candida albicans is the most prevalent species isolated in these infections, however the incidence of “non-albicans” species has been increasing. The aim of this study is to identify the species and to evaluate the resistance rate to fluconazole (FCZ) in 93 strains of Candida spp. from clinical samples isolated in Universidade Federal de Juiz de Fora’s university hospital.

MATERIAL AND METHODS: Clinical isolates were identified by mass spectrometry (MALDI-TOF), and in order to classify strains concerning FCZ resistance profile, an MIC₅₀ test (Minimum Inhibitory Concentration of 50% yeast cells) was performed. This screening of resistant strains was performed according to the CLSI standards (M27-A3 protocol). It was observed preliminarily the incidence of 44% for C. albicans and 56% for “non-albicans” species. In addition, 31% of 93 isolates were classified as resistant to FCZ. More observations will be conducted in order to assess the prevalence of these clinical strains.

DISCUSSION AND CONCLUSION: This study highlights the importance of epidemiological characteristics on Candida species in Brazil, alongside the rapid and reliable identification of these pathogens for an effective candidiasis treatment.

KEY WORDS: Candida spp., epidemiology, fluconazole

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