Title: Candida YEASTS IN A BRAZILIAN UNIVERSITY HOSPITAL: DISTRIBUTION AND ANTIFUNGAL SENSITIVITY PROFILE

Authors Khouri, S.¹; Paula, C. R.²; Ruiz, L. S.³; Auler, M. E.⁴; Da Silva, B. C. M.⁵; Hahn, R. C.⁶; Domaneschi, C.²; Nascimento, D. C.⁷; Baroni, F. A.⁸; Abreu, D. P. B.⁸; Monteiro, S⁷.

Institution ¹ UNIVAP – Universidade do Vale do Paraíba (Avenida Shishima Hifumi, n° 2911, Urbanova, São José Dos Campos, São Paulo), ² USP – Universidade de São Paulo, Faculdade de Odontologia (Avenida Professor Lineu Prestes, n° 2227, Cidade Universitária, São Paulo, São Paulo), ³ Instituto Adolfo Lutz (Rua Rubéns Arruda, n° 6000, Bauru, São Paulo), ⁴ UNICENTRO – Universidade Estadual do Centro-Oeste (Rua Padre Honorino João Muraro, n° 875, Santa Cruz, Guarapuava, Paraná) ⁵ USP – Universidade de São Paulo, Faculdade de Medicina (Avenida Dr. Arnaldo, n° 455, Cerqueira César, São Paulo, São Paulo), ⁶ UFMT - Universidade Federal de Mato Grosso (Avenida Fernando Corrêa da Costa, nº 2367, Bairro Boa Esperança, Cuiabá, Mato Grosso), ⁷UNIP – Universidade Paulista (Avenida Comendador Enzo Ferrari, n° 280, Swift, Campinas, São Paulo) ⁸ UFRRJ – Universidade Federal Rural do Rio de Janeiro (BR 465, Km 7, Seropédica, Rio de Janeiro).

Abstract:

There has been a considerable increase in fungal infections in hospitals in recent years, mainly in immunocompromised patients. Candida yeasts species are usually associated to nosocomial infections. Carry out an epidemiological study, recording the infection levels of this yeast, as well as the colonization and distribution of the different strains in clinical specimens from different sectors of the University Hospital and their susceptibility to antifungal drugs. The yeast samples were isolated from clinical specimens and medical equipment in different sectors of the hospital. The identification was reached phenotypically and genotypically. The sensitivity front of five antifungal agents was tested using the E-test®. Of these 100 isolates, 77% were characterized as colonization and 23% as nosocomial (hospital-acquired) infections. Candida albicans was the most frequent (40%), followed by C. tropicalis (25%), C. parapsilosis (21%) and C. glabrata (0.9%). Non-albicans species accounted for 71.4% of the cases of colonization and 52.1% of infection. The ICUs had the largest number of positive samples (45%). Renal failure and multiple traumas were the most frequent underlying diseases. Antibiotic therapy and invasive procedures were the main risk factors. The presence of Candida yeast is still a frequent complication among patients admitted to tertiary hospitals. Epidemiological investigations of these agents in the hospital setting are very important, so that preventive measures may be taken against infections.

Keywords: Candida, hospital, antifungal sensitivity

Fomentation agency: CAPES, CNPq, FAPESP