TITLE: EPIDEMIOLOGY OF FUNGAL INFECTIONS RELATED TO HEALTH ASSISTANCE IN PRIVATE HOSPITAL OF GOVERNADOR VALADARES, IN THE PERIOD OF 2012 TO 2016.

AUTHORS: MARTINS, M.V.², SOUSA, L.V.N.F.², SILVA, K.P.^{1,2}, ANDRADE, D.O.S., MIRANDA, T.M.³, SANTOS, A.L.S.⁴

INSTITUTIONS: ¹ HSLGV - HOSPITAL SÃO LUCAS DE GOVERNADOR VALADARES (RUA BARÃO DO RIO BRANCO, 662 - CENTRO - CEP: 35010-030), ² UNIVALE - VALE DO RIO DOCE UNIVERSITY (RUA ISRAEL PINHEIRO, 2000 - BAIRRO UNIVERSITÁRIO - CEP: 35020-220), ³ ICC - INSTITUTO CARLOS CHAGAS (RUA SETE DE SETEMBRO, 2800, CENTRO - CEP: 35010-172), ⁴ UFRJ - UNIVERSIDADE FEDERAL DO RIO DE JANEIRO (UNIVERSITY CITY, CCS, BLOCK E - SUBSOLO, ROOM 05, FUNDÃO ISLAND, RIO DE JANEIRO - RJ, CEP 21941-590)

ABSTRACT:

Hospital fungal infections have increased in the last decades in immunosuppressed patients, resulting in serious health problems and high mortality rates. They account for up to 60% of deaths from Health Care Related Infections (HCRI). Fungemia occurs frequently in hospitalized patients, with Candida species as the most common causes. The study aimed to know the epidemiology of HCRI by fungi in patients. We analyzed the SCIH database and microbiological exams given by a third party laboratory. The information was categorized by complexity of the care, etiology and site of occurrence of fungal infection. In 2012, 7 yeasts associated with HCRI were isolated in the UTI (n = 6, 85.7%) and in the IU (n = 1, 14.3%). In the UTI (n = 3, 42.8%), *C. tropicalis* (n = 2, 28.6%) and UI (n = 1, 14.3%), C Glabrata only in the UTI (n = 1, 14.3%). The sites were systemic (n = 3, 42.8%), respiratory (n = 2, 28.6%), bloodstream (n = 1, 14.3%) and urinary %). In 2013, isolated yeasts in IRAS totaled 15, being UTI (n = 14, 93.3%) and IU (n = 1, 6.7%). Among them, *C. albicans* in the UTI (n = 9; 60%) and in the UI (n = 1, 6.7%), C. tropicalis only in the UTI (n = 3; 20%) and C. krusei UTI (n = 2; 13.3%). The sites were respiratory (n = 8, 53.3%), urinary (n = 4, 26.7%) and systemic (n = 3; 20%). In 2014 the isolated totaled all in the UTI. Of 6. albicans (n = 4, 66.6%), C. krusei (n = 1, 16.7%) and C. parapsilosis (n = 1, 16.7%). The sites were respiratory (n = 4, 66.6%), urinary (n = 1, 16.7%) and systemic (n = 1, 16.7%). In 2015, isolated fungi in IRAS totaled 14, with UTI (n = 10, 71.4%) and IU (n = 4, 28.6%). Among these, *C. tropicalis* in the UTI (n = 3, 21.4%) and in the IU (n = 2, 14.3%), C. albicans in the UTI (n = 4, 28.7%), C. glabrata In the UTI (n = 3, 21.4%) and Aspergillus flavus in the UTI (n = 1, 7.1%) and in the UI (n = 1, 7.1%). The sites affected were respiratory (n = 7; 50%), systemic (n = 3; 21.4%), urinary (n = 2; 14.3)% and surgical (n = 2, 14.3%). In 2016, isolated yeasts totaled 5 (5.32%), all in the UTI, with C. albicans (n = 4, 4.3%) in the respiratory tract and C. glabrata (n = 1, 1.06%) in the urinary tract. Fungal infections are an increasing cause of morbidity and mortality in hospitals worldwide, especially in patients immunosuppressed and

submitted to highly complex treatments, with *Candida* species as the main etiology. Respiratory, systemic and urinary sites.

Keywords:, HCRI, Intensive Care Unit, epidemiology, fungemia, prevention.

Development agencies: HSLGV, ICC, UFRJ, UNIVALE.