TITLE: Catheter-ASSOCIATED URINARY TRACT INFECTION (CAUTI) IN INPATIENTS OF A BRAZILIAN HOSPITAL: BACTERIAL SUSCEPTIBILITY PROFILE STUDY

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ABSTRACT:

Healthcare-associated Urinary tract infections are among the major concern regarding patients admitted to intensive care units (ICU), and multiresistant uropathogens are a growing challenge for clinical treatments. This study aimed to analyze the etiological agents of CAUTI and their antimicrobial susceptibility profile. A total of 120 urocultures were performed with samples from patients with indwelling urinary catheter at the ICU of a Hospital at Lagoa da Prata, MG. Samples were collected from June 2015 to June 2016, and 37 cultures presented only one species of microorganisms identified with countings ≥10^5 CFU/mL. The microorganisms isolated were: *Escherichia coli* (46%), *Klebsiella pneumoniae* (18.9%), *Enterobacter cloacae* (5.4%), *Citrobacter youngae* (2.7%), *C. freundii* (2.7%), *Acinetobacter baumannii* (2.7%), *Pseudomonas aeuroginosa* (2.7%), *Staphylococcus epidermidis* (2.7%) *S. haemolyticus* (2.7%), *S. sapropyticus* (2.7%), β-hemolytic *Streptococcus* (2.7%), *Candida tropicalis* (5.4%) and *C. albicans* (2.7%). Using VITEK II we detected Gram-negative and Gram-positive bacteria resistant to at least three and six antimicrobials classes, respectively, extended spectrum β-lactamases in 35.3% of *E. coli* isolates, and yeasts were sensitive to three antifungal classes. The statistical analysis indicated that there was no significant difference regarding the variation of microorganisms detected between men and women (P> 0.05). The predominant age group was over 60 years old. There was no statistical difference in age between patients who had positive or negative results for microbial isolation in urocultures (P> 0.05). Due to the extension of the Brazilian

territory and the regional differences related to the antimicrobial susceptibility profile, our data becomes even more relevant.

Keywords: Catheter-associated urinary tract infection, intensive care unit, uropathogens, antimicrobial susceptibility profile

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