## **TITLE**: URINARY TRACT INFECTIONS/COLONIZATIONS IN PATIENTS ADMITTED TO AN INTENSIVE CARE UNIT IN A UNIVERSITY HOSPITAL-RETROSPECTIVE COHORT STUDY

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Urinary tract infections (UTIs) are the most frequent in hospitalized patients, but in Intensive Care Units (ICUs), they usually occupy the third place and are associated with the use of indwelling urinary catheter (CVD). The objectives of the study were: to evaluate the etiology, antimicrobial resistance patterns, risk factors, relationship with bloodstream infections. The study model was observational, with a retrospective cohort. In total, 61 patients were included, admitted from 2012 to 2014. The unit is mixed, clinical-surgical, for adult, in on university hospital. The risk factors for these infections included: demographic, clinical, microbiological and in addition to the evolution to sepsis, through the review of medical records and epidemiological records of the hospital control service. The mortality rate in the cohort was high (32.7%), with a report of severe sepsis/septic shock in 29.47% of patients. However, the isolation of the same microorganisms in urine and blood was only verified in only 13.11% of the cases. Regarding etiology, except for one patient, the infections were monomicrobial and among 62 isolates microorganisms, the most frequent were: Escherichia coli (25.8%), Enterococcus faecalis (16.12%), Klebsiella pneumoniae (12.9%) and Candida albicans (9.67%). Considering the bacterial cultures of bacterial multidrug resistance (MDR) pathogens added to the cases of candiduria, and 35.4% have agentes resistant to antibiotics. Globally, the following risk factors for these infections were the most frequente: a) related to the patient - male (54.90%), non-elderly (mean age 53 years), from the medical clinic (49.1%). b) among the extrinsic factors- the use of indwelling urinary catheter (83.6%) during an prolonged period (mean of 12 days) was the most expressive risk fator, besides other invasive procedures (CVC and VM), use of antibiotics prior to diagnosis of UTI (96.75%), as well as the presence of inappropriate antimicrobial therapy (62.9%).UTI infections in the urinary tract were associated with prolonged bladder cauterization, and association with episodes of ICS, a high mortality, and 35.4% due to multi-resistant microorganisms and Candida spp. Although they are usually considered benign, it was observed that only 13.11% they were foas a focus of secondary bacteremia.

Keywords: Bladder catheter, Candidurias, UTI, Epidemiological study

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