

**TITLE:** PREVALENCE OF URINARY TRACT INFECTIONS IN PATIENTS OF AN ADULT INTENSIVE TREATMENT CENTER OF A PUBLIC HOSPITAL OF BELO HORIZONTE, MAIN ISOLATED MICRO-ORGANISMS AND SENSITIVITY PROFILE.

**AUTHORS:** BITTENCOURT, J.A; GOMES. T. P; SOUZA, A.P.J; MANSO, C.C; PAIVA, L.F.R.

**INSTITUTION:** CENTRO UNIVERSITÁRIO UNA, BELO HORIZONTE, MG (RUA DOS GUAJAJARAS, 175, CEP 30180-100, BELO HORIZONTE- MG, BRASIL)

**ABSTRACT:**

Urinary tract infection (UTI) is the invasion and multiplication of bacteria in the tissues of the urinary tract, from the urethra to the kidneys. It is the main infection in the hospital environment, can be classified as high and low depending on its location, and acute or chronic. Severe and life-threatening patients are placed in the intensive care unit (ICU) because they require continuous care. Many of these patients require the use of delayed bladder catheter, causing several factors associated with urinary tract infection. This study was carried out to evaluate the urocultures of a public hospital in Belo Horizonte to know the prevalence, main isolated micro-organisms and antimicrobial susceptibility profile. The analysis was performed through a data collection of the exams performed in the Microbiology Laboratory of a general hospital and 100% public. From this the results obtained were tabulated and analyzed statistically. Between February 2017 and March 2018, in the microbiology laboratory of the hospital, 475 urine samples were analyzed for adult ICU, of which 175 were positive. Of the positive samples in 20% there was growth of *Escherichia coli*, which was shown to have a higher resistance rate to ampicillin and imipenem, and a higher sensitivity rate to ertapenem and nitrofurantoin. The second bacterium with the highest growth rate was *Klebsiella pneumoniae*. With a percentage of 18%, this enterobacterium presented a higher sensitivity to the antimicrobial amikacin and gentamicin and resistant to ampicillin, ciprofloxacin and sulfamethoxazole-trimethoprim. Since UTI is the most prevalent of all nosocomial infections, the present study assists medical evaluation at the time of prescription, in choosing the correct antimicrobial, thus avoiding unnecessary empirical therapy and the indiscriminate use of antimicrobials.

**Keywords:** urinary tract infection; UTI in ICU; intensive care center; epidemiology of UTI; physiopathology of urinary tract; laboratory diagnosis of UTI.