

TITLE: *PSEUDOMONAS AERUGINOSA* AND *ACINETOBACTER BAUMANNII* RESISTANT IN A MUNICIPAL HOSPITAL IN THE CITY OF UBERLÂNDIA/MG

AUTHORS: MEDEIROS, I.G.F.; ALMEIDA, A.M.; PIMENTA, J.P.; SANTOS, R.C.C.; RIBAS, R.M.; GONTIJO FILHO, P.P.; BORGES, L.F.A.

INSTITUTION: UNIVERSIDADE FEDERAL DE UBERLÂNDIA, UBERLÂNDIA, MG (AV. PARÁ, 1720, CEP: 38400-902 – CAMPUS UMUARAMA, UBERLÂNDIA, MG - BRAZIL)

ABSTRACT:

Pseudomonas aeruginosa and *Acinetobacter baumannii* are widely related to hospital infections, and with decreased sensitivity to antimicrobials. The number of these infections is one of the indicators of quality in health care, enhancing their impact in terms of morbidity, mortality and costs, especially in intensive care units. This study aimed to evaluate the resistance profile of *Pseudomonas aeruginosa* resistance and *Acinetobacter baumannii* resistant to carbapenems, compared to other antimicrobial in a municipal hospital in the city of Uberlandia/MG. The samples and antimicrobial susceptibility profile were recovered from the laboratory by the Hospital and Maternity Municipal, from May 2013 to June 2015. It was observed that pneumonias infections were the most prevalent in both *Pseudomonas aeruginosa* (56.5%) and *Acinetobacter baumannii* (50.8%), men older than 61 years old, equally in the three years of study (33 %), and all more frequent in the ICU. Beyond the beta-lactams resistance, a high quinolones resistance was observed (84%), and sensitivity to folic acid inhibitors (>55%), which evidence the return of old drugs. Resistance to multiple drugs as piperacillin/tazobactam, cefepime and ciprofloxacin (>90%), widely used as antimicrobial prophylaxis, reflects in the combination of one or more mechanisms of resistance. During the study period was not found resistance to polymyxin. The resistance was higher in *Pseudomonas* compared to quinolones/fluoroquinolones, whereas *Acinetobacter* it was also inhibited by to cephalosporins and beta-lactams. The use of epidemiological surveillance to identify the problems and risks of infection, the practice of prevention and control measures and the exposure of this information can significantly contribute to the reduction of these infections, thus ensuring the safe care of patients.

Key-words: *Pseudomonas aeruginosa*; *Acinetobacter baumannii*; resistance; Infection.

Development Agency: Fundação de Amparo à Pesquisa do Estado de Minas Gerais (FAPEMIG)