ESKAPE group (Enterococcus faecium, Staphylococcus aureus, Klebsiella pneumoniae, Acinetobacter baumannii, Pseudomonas aeruginosa, and Enterobacter species) are important agents of nosocomial infection that are frequently resistant to broad-spectrum antimicrobial agents. In intensive care units (ICUs), fragility of the patients facilitates the presence of nosocomial infections. The present study evaluated the occurrence of ESKAPE pathogens and their antibiotic resistance profile in patients admitted in an ICU of a tertiary hospital, in 2017. Pathogens identification and antimicrobial susceptibility patterns were collected from record books from the clinical microbiology laboratory. Out of 289 bacterial isolates, 148 (51,2%) were identified as pathogens of the ESKAPE group. Acinetobacter baumannii was the most isolated microorganism (30.4%) followed by Pseudomonas aeruginosa (28.4%), Klebsiella pneumoniae (22.3%), Enterobacter sp. (10.1%) and Staphylococcus aureus (8.8%). Enterococcus faecium was not identified during the referred period. Regarding the resistance patterns, for A. baumannii high levels of resistance were identified for meropenem (93.3%), imipenem (88.8%), ceftazidime and ciprofloxacin (80%). For Enterobacter sp. high levels of resistance were detected for ampicillin (100%) and ciprofloxacin (73.3%), whereas for P. aeruginosa were observed for aztreonam (66.6%), imipenem (64.3%) and meropenem (59.5%). For K. pneumoniae high levels of resistance were detected for ampicillin (81.1%), cefepime, ceftazidime and ceftriaxone (72.2%), while for S. aureus were observed for oxacillin (76.9%), tetracycline (84.6%), erythromycin and clindamycin (69.2%). This study showed relevant data on multidrug resistance bacterial strains in critical areas. Our data are highly relevant for surveillance systems and raise discussions on containment strategies and rational use of chemotherapy.

Keywords: ESKAPE group; Intensive Care Unit; Antimicrobial Resistance

Development Agency: PPg Enfermagem/UFJF