TITLE: ANTIMICROBIAL SUSCEPTIBILITY PROFILE OF PROTEUS MIRABILIS ISOLATED FROM SEVERAL SOURCES OF INFECTIONS.

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ABSTRACT:
Proteus mirabilis is an opportunistic pathogenic bacterium, responsible for severe infections in hospitalized patients. It can be found in the respiratory tract, wounds, eyes, nose, throat, skin and gastroenteritis. Several studies demonstrate an increase in the number of clinical isolates of this microorganism multiresistant to antimicrobials of clinical use including producers of extended-spectrum beta-lactamase (ESBL), responsible for hydrolyzing the beta lactam ring of cephalosporins. This work aimed to investigate the susceptibility of *P. mirabilis* to several antimicrobials. Fifty-one *P. mirabilis* strains were isolated from hospitalized patients of Londrina University Hospital during the period from January 2015 to March 2017. . The antimicrobial susceptibility profile was performed by VITEK® 2 automated system (bioMérieux Brasil) and ESBL were identified by disk-diffusion test. The following antimicrobials were analyzed: Amikacin; Gentamicin, Amoxa + Ac. Clavulanic; Ampicillin; Cephalothin; Cefuroxime; Ceftazime, Ceftriaxone, Cefepime; Meropenen; Ertapenem; Imipenem, Piper + Tazobactam; Ciprofloxacin; Norfloxacin; B.C. Nalidixic; Sulfa + Trimethoprim), Ampic. + Sulbactam; Aztreonam; Cefoxitin. Regarding to resistance we obtained the following results: Amicacin (Resistant: 35.29%), Gentamicin (50.98%), Amoxa + Aca. Clavulanic (47.06%), Ampicillin (82.27%), Cephalothin (88.23%), Cefuroxime (84.31%), Ceftazime (82.35%), Ceftriaxone (86.27%), Cefepime (82.35%), Meropenen (0,0%), Ertapenem (3.92%), Imipenem (1.96%), Piper + Tazobactam (3.92%),; Ciprofloxacin (47.05%), Norfloxacin (50%), B.C. Nalidixic (76.46%); Sulfa + Trimethoprim (74.50%), Amp. + Sulbactam (76.48%), Aztreonam (82.35%), Cefoxitin (52.94%). And for ESBL 70.58% were resistant. Thus, we demonstrated that there was a higher prevalence of *P. mirabilis* strains resistant to antimicrobials including ESBL producers

Keywords: *Proteus mirabillis,* multiresistant, ESBL.

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