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Antibiotic resistance profiles of non-fermentative Gram negative rods: *Acinetoabacter* spp., *Pseudomonas* spp., and *Stenetrophomonas* spp., in Kocatepe University Hospital, 2012-2015

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Background & Aim: Non-fermenting Gram negative bacteria are remarkable cause of antimicrobial resistance; propensity to cause outbreaks and complex epidemiology. It is important to have data about antimicrobial resistance for reducing morbidity and mortality. The aim of this study was to evaluate susceptibility rates of non-fermentative bacteria isolated from various clinical specimens in Microbiology Laboratory, ANS Research and Practice Hospital, Afyon Kocatepe University, between October 2012 and September 2015.

Methods: Of the isolated from blood, urine, wound and sterile fluids 639 non-fermenting Gram negatives (NFGN), 477 (74.6%) were identified as *Pseudomonas aeruginosa*, 135 (21.1%) were *Acinetobacter baumannii* and 27 (4.3%) were *Stenotrophomonas maltophilia*. The isolates were identified by conventional methods and VITEK-2 automated identification system (bio-Mérieux, Marcy l'étoile, France). Antibiotic susceptibility tests were performed by the Kirby-Bauer disk-diffusion method according to the standards of Clinical and Laboratory Standards Institute (CLSI).

Results: Resistance rates of *P. auriginosa* was found as follows: Amikacin 32%, gentamicin 42%, imipenem 43%, merpenem 43%, ciprofloxacin 50%, levofloxacin 52%, cefepim 38%, ceftazidim 63%, piperacillin/tacobactam 85%, for *Acinetobacter baumannii*; Amikacin 53.3%, gentamicin 56.6%, imipenem 83%, meropenem 86%, ciprofloxacin 100%, ceftazidim 100%, piperacillin/tazobactam 85%, colistin 0% and for *S. malthophilia*, levofloxacin 66.6% and trimethoprim/sulfamethoxozole 0%.

Conclusions: Colistin was found as the most effective antibiotic against *Pseudomonas* and *Acinetobacter* strains and trimethoprim/ sulfamethoxozole was for the *Stenotrophomonas*.

Biography

Recep Kesli was graduated from Erciyes University, Faculty of Medicine. He has obtained Microbiology Specialist title in 2001. He is working at Afyon Kocatepe University, School of Medicine as an Associate Professor and Chair. He has published a book and wrote many book chapters. His areas of interests are diagnostic techniques of HCV, *Helicobacter pylori* and *anaerobic bacteria*. He has also published articles in international SCI/SCIE and national journals (more than 60) in Turkish and English.

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