Nosocomial infection by non-fermenting gram negative bacilli in tertiary care hospital: Screening and cure

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The nosocomial infections are one of the biggest challenges faced worldwide in tertiary care hospital. Non-fermenting gram negative bacilli have been found associated with the pathology of lower respiratory tract infection. The nosocomial infection affects patient of all age group and both sexes throughout the life span of an individual but prevalence is higher in males. Increasing antibiotic resistance in pathogens makes it essential to determine the antibiotic resistance pattern of commonly isolated lower respiratory tract pathogens so that appropriate antibiotics can be used for prevention of further spread of antimicrobial resistance in community and hospitals. The present study on 1526 samples from tertiary care hospital was planned to identify the non-fermenting bacteria using a standard conventional method, Antibiotic Susceptibility Test (AST) was performed by Kirby-Bauer disc diffusion method and Vitek-2. Out of 1526 respiratory samples, 172 were identified as non-fermenting gram negative bacilli, out of which Acinetobacter baumanii was the predominant isolate accounting 103 (59.88%) specimens followed by Pseudomonas aeruginosa 57 (33.13%). Other isolates were Stenotrophomonas maltophilia 9 (5.23%) and Burkholderia cepacia 3 (1.74%). From the 172 samples endotracheal aspirate was found to be the most infected amongst all the other samples. Acinetobacter baumanii and Pseudomonas aeruginosa were the most common NFGNB isolated in our study from patients of respiratory tract infections. Both Acinetobacter baumanii and Pseudomonas aeruginosa showed good sensitivity to colistin, amikacin, cefoperazone, while in most cases carbapenam is found to be highly resistant. Colistin along with amikacin and cefoperazone should be used against this pathogen.

Biography
Ridhima Wadhwa is pursuing BTech+MTech (Dual) degree course from Amity Institute of Biotechnology, Amity University, Uttar Pradesh from India.

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