Dear Editor,

*Pseudomonas aeruginosa*, an important nosocomial pathogen is difficult to treat because of high antimicrobial resistance.[1] The common form of resistance is mediated by lack of drug penetration and / or carbapenem hydrolyzing ß-lactamases.[2] Detection of metallo ß-lactamase (MBL)-producing *P. aeruginosa* is crucial for the optimal treatment of patients. The present study was undertaken to study Imipenem resistant *P. aeruginosa* for MBL production.

Seventy six *Pseudomonas aeruginosa* isolates were obtained from various types of specimens (38 respiratory secretions, 10 body fluids, 10 pus swabs, 8 catheter tips, 5 catheterized urine samples and 5 - blood culture) over a one year period from October 2006 to September 2007. Isolates were identified by standard laboratory techniques and antibiotic sensitivity was performed on Mueller Hinton Agar plates by Kirby Bauer disc diffusion method using commercially available discs (Hi Media) according to CLSI guidelines.[3] Disc approximation test was used to detect MBL production - the zone size difference between imipenem alone and imipenem+EDTA being $\geq 7$ mm. *P. aeruginosa* ATCC 27853 was used as a negative control.

In this study 11 out of 76 (14.47%) strains were resistant to imipenem. Of these 11 strains, 8 (10.53%) were found positive for MBL production. Strains producing metallo beta lactamase were 100% sensitive to colistin, 81% to piperacillin/ tazobactam and 54% to gatifloxacin. Thus, MBL production was observed in multiresistant *P. aeruginosa* which were imipenem resistant.

EDTA impregnated imipenem discs can be easily used and are inexpensive for primary screening for multi drug resistant *P. aeruginosa* isolates. Sensitivity to Colistin represents the best treatment option for metallo betalactamase producing *P. aeruginosa*.

References

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