Letters to the Editor
Readers are encouraged to write letters to the editor concerning articles that have been published in Japanese Journal of Infectious Diseases.

Antimicrobial Resistance among Clinical Isolates of Pseudomonas aeruginosa from Patients in a Teaching Hospital

Dear Editor: Pseudomonas aeruginosa has been identified to be one of the most frequent causes of nosocomial infection, and has been associated with poor patients’ prognosis (1,2). Because of the widespread use of antimicrobials, and carbapenems in particular, a higher incidence of multidrug-resistant (MDR) *P. aeruginosa* isolates have been described principally in intensive care units (ICUs) (2). In a recent issue of the JJID we read the article by Dr. Babay, retrospectively determining antimicrobial resistance of *P. aeruginosa* to antipseudomonal agents, evaluating associated underlying conditions, and mortality over a 5-year study period (3). Higher death rates were observed among ICU patients, but astonishingly, the author found MDR *P. aeruginosa* more frequently among non-ICU patients. Although we fully agree with the suggestions made by Dr. Babay, namely, that a more rigorous monitoring of MDR in *P. aeruginosa*, a higher rate of early adequate antimicrobial treatment, and a better adherence to infection control measures are highly warranted in an aim to reverse the emergence of MDR of this morbid pathogen, we want to comment on some issues. Firstly, for both, to early recognize patients with a beginning infection, as well as within the framework of microbial monitoring, clear indications should be standardized in a protocol for performing microbiological culturing (4,5). However, in the current manuscript, no indications or frequency for culture sampling is reported. In addition, no distinction was made of the total number of cultures performed in ICU versus non-ICU patients. Secondly, besides the variables already collected, many factors contributing to the development of MDR are highly present in an ICU environment (e.g., antimicrobial exposure, patient transfer, longer preinfection hospital and/ or ICU length of stay, acute illnesses, multiple comorbidities, microbial colonization, heavy use of invasive devices, cross-transmission, etc.). We wonder if these data are available, and if so, we would like to suggest the author to build a logistic regression model including these variables, and to determine potential risk factors independently related with MDR *P. aeruginosa* as this would be extremely valuable for daily clinical practice. We would appreciate it if Dr. Babay could further elaborate on these issues. Lastly, we would like to congratulate the author with the noticed decline in resistance to multiple antipseudomonal agents attributable to their efforts in increasing healthcare workers’ awareness of infection control and prevention measures.

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