Discordance in the minimal inhibitory concentrations of ertapenem for Enterobacter cloacae: Vitek 2 system versus Etest and agar dilution methods

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Résumé en anglais	Our objective was to compare the ertapenem minimal inhibitory concentrations (MICs) for *Enterobacter cloacae* isolates categorized intermediate or resistant to ertapenem when measured with the Vitek 2 system, with the MICs for these isolates when measured by two methods performed in agar medium: the Etest and agar plate dilution method (APDM). Overall, 50 E. cloacae isolates were included in the study. The mean MIC of ertapenem was 2.92±1.77µg/ml according to the Vitek 2 system, 0.94±0.84µg/ml according to the Etest strips, and 0.93±0.62µg/ml according to the APDM. Furthermore, the MICs determined by the Vitek 2 system were higher than the MICs determined by the two other methods for 96% of strains. Lastly, according to the Etest strips and APDM, 42% of *E. cloacae* were susceptible to ertapenem. No carbapenemase was identified by the screening method used. Using the Vitek 2 system to determine ertapenem MICs for E. cloacae can have potential consequences in terms of additional carbapenemase-detecting tests and antimicrobial therapy. It would be interesting to determine if the Vitek 2 system is more effective for the detection of carbapenemase producers with low-level carbapenem resistance than the two methods performed in agar medium.
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