Clinical significance on MicroScan Rapid plus series using various antibiotic-resistant bacteria

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Abstract

MicroScan Rapid plus Neg II Series and MicroScan Rapid plus Pos Series by Siemens Healthcare Diagnostics K. K. are the panels which enable to measure identification and antimicrobial susceptibility testing quickly and we have confirmed that it is useful for detecting drug resistance bacteria.

As the identification result of comparing Rapid plus series with the current panel by using 143 strains of various drug resistance bacteria, Gram positive cocci was 87.7%, glucose fermenter was 100% and glucose non-fermenter was 77.3 in Gram negative bacilli. On the evaluation of antimicrobial susceptibility testing, Rapid plus series, in comparison with the current panel, confirmed the lower tendency of MIC value on some drugs, but it basically presented the good concordance rate.

In terms of the reporting time of antimicrobial agent, non-fermenter or MRCNS reported the result as needed after 8 hours and it took a little longer time for the report of antimicrobial agent. On the other hand, 80% or higher of antimicrobial agent on panel was reported for intestinal bacteria in 4.5 hours and for MRSA in 6.5 hours. It enabled to report the testing result on the same day.

Due to the results above, Rapid plus series was highly valued on the usability, such as the early detection of drug resistance bacteria and the selection of therapeutic agents.

Key Words: WalkAway Plus, Rapid plus series, drug resistance bacteria, Rapid method for antimicrobial susceptibility testing

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