β-lactam Antibiotic Susceptibility Testing of MRSA?

Dear Editor,

We want to congratulate Dr. K. Rajaduraipandi and colleagues for sharing the data on methicillin resistant Staphylococcus aureus (MRSA) from southern districts of Tamilnadu. Although, the work is carefully and critically done, some clarifications are needed.

Having carefully gone through the article, it was very difficult to understand as to why the sensitivity of MRSA strains to penicillins and cepham has been reported by the authors. As per NCCLS, oxacillin-resistant staphylococci are resistant to all currently available β-lactam antibiotics. Further, routine testing of other penicillins, β-lactamase inhibitor combinations, cepham and carbapenems is not advised. NCCLS gives warning that, for oxacillin-resistant Staphylococcus aureus, all penicillins, cepham and other β-lactams may appear active in vitro but are not effective clinically and isolates should not be tested and reported as susceptible.

Authors have tested MRSA isolates for susceptibility to penicillin viz. penicillin G, ampicillin, cloxacillin and cepham viz. cephalaxin, cephotoxime and reported some of the strains as susceptible to them. As many as 0.04% and 69.2% of MRSA isolates from clinical samples were shown to be susceptible to penicillin G and cloxacillin respectively. NCCLS recommends that, of the antistaphylococcal β-lactamase-stable penicillins, oxacillin can be tested and results can be applied to other penicillinase-stable penicillins, cloxacillin and dicloxacillin. Cloxacillin disks should not be used, because they may not detect oxacillin-resistant Staphylococcus aureus.

Through this letter, we would like to emphasize strict adherance to NCCLS guidelines that serve as standard for uniformity and are based on sound technical background. This will also avoid misleading the clinicians for the choice of drug for effective patient management.

References


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