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Correspondence

Susceptibility testing of *Staphylococaus aureus*

Sir,

Chitnis *et al*[1] have done an excellent job of determining the MIC of daptomycin, linezolid and teicoplanin in *S.aureus* and *Enterococcus faecalis* but they did not interpret the sensitivity results properly, as given below:

(i) Oxacillin disc diffusion (DD) has a sensitivity of only 91 per cent and specificity of only 58.9 per cent while cefoxitin DD has sensitivity and specificity of 97.8 & 100 per cent, respectively[2]. Therefore, oxacillin DD could not have given a result identical to cefoxitin DD.

(ii) Though the authors have reported the susceptibility of erythromycin and clindamycin, but they did not make an effort to detect inducible resistance to clindamycin which has got immense clinical significance.

(iii) The table shows that resistance to ampicillin was 67.67 per cent while MRSA rate was 73.33 per cent which implies that almost 5 per cent of the MRSA isolates were actually sensitive to ampicillin[1]. The authors seem to have committed an error in susceptibility test reporting.

(iv) For MRSA there is no need to test and report beta-lactams (Table) as these all are considered resistant irrespective of their zone diameters.

(v) CLSI has done away with vancomycin DD and recommends only MIC testing[3]. Therefore, the data presented in Table on vancomycin susceptibility based on DD are not valid.

(vi) High level aminoglycoside (gentamicin 120 µg) needs to be tested for enterococci to determine its synergy with ampicillin/penicillin/vancomycin. The authors have tested 10 µg instead[3].

(vii) According to CLSI (2009) the vancomycin MIC for susceptible is ≤2 µg/ml, intermediate is 4-8 µg/ml and resistant is ≥16 µg/ml. The authors have reported 16 MRSA isolates with MIC of 3µg/ml and classified these as sensitive[3].

References

1. Chitnis S, Katara G, Hemvani N, Pareek S, Chitnis DS. *In vitro* activity of daptomycin & linezolid against methicillin resistant *Staphylococcus aureus* & vancomycin resistant enterococci isolated from hospitalized cases in Central India. *Indian J Med Res* 2013; *137* : 191-6.
2. Swenson JM, Lonsway D, McAllister S, Thompson A, Jevitt L, Zhu W, *et al*. Detection of mecA-mediated resistance using reference and commercial testing methods in a collection of *Staphylococcus aureus* expressing borderline oxacillin MICs. *Diagn Microbiol Infect Dis* 2007; *58* : 33-9.
3. Clinical and Laboratory Standards Institute. *Performance standards for antimicrobial susceptibility testing*; 19th informational supplement. CLSI document M100-S19. Wayne, PA: Clinical and Laboratory Standards Institute; 2009.

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