

Authors' response

Sir,

In our study published in the Indian J Med Res, March 2012¹, disc diffusion susceptibility, and molecular methods to determine of minimum inhibitory concentrations (MIC) were studied. We concluded that multiplex PCR can be used for confirmation of the results obtained by conventional phenotypic methods when needed.

Conventional methods are still widely used. MIC testing is among the often used and sensitive methods as well as the DD test. However, identification and determination of the susceptibility to antibiotics of staphylococci by conventional methods (DD and MIC tests) require a minimum of two-days period, whereas the detection of antibiotic resistance genes by PCR assay can be done within a few hours. The PCR based tests are rapid and reliable methods for antibiotic susceptibility and important to institute appropriate therapy. In our study we emphasized on this.

I would like to thank Anil Kumar² for raising questions on our study.

My response is given below:

- (1) In Material & Methods section under subtitle "Susceptibility testing", the incubation time was written as 37 °C by mistake instead of 35 °C. It needs to be corrected as 35 °C.
- (2) As reported by author², testing at temperatures above 35°C may not detect MRSA. This is not exactly true. Also, in a study conducted by Skor *et al*³, the influence of incubation time (18 and 24 h) and temperatures (30, 35, 36 and 37°C) on the performance of 10- and 30-µg cefoxitin disks and cefoxitin E test on Mueller-Hinton agar were evaluated for *mecA*-positive and *mecA*-negative *S. aureus*. In this study, the effect of increase in temperature was not significant.
- (3) DD was not the method was used in our study, it was one of three methods (DD methods, MIC and molecular methods) used. One of the aims in

our study was to compare various methods and emphasize the role of rapid and accurate tests.

- (4) Methicillin resistance was determined by three different methods.
- (5) It was discussed in discussion section.
- (6) All *S. aureus* isolates (positive for coagulase test) carried the *femA* gene. Also relevant references were quoted in support.
- (7) The idea is solely the opinion of the author. I disagree with the author's proposal.
- (8 & 9) The author may be right, but primary aim was not that. The idea is solely the opinion of the author.
- (10) Table IV. Relationship between gentamicin resistance and the present of three resistance genes (*aac(6')/aph(2'')*, *aph(3')-IIIa*, *ant(4')-Ia*), the heading of the fourth column was given right.
- (11) This Table (Table II) was given to demonstrate the accuracy of MIC testing for vancomycin.
- (12) According to CLSI criteria, the incubation period must be at least 18 h. Therefore, there was no mistake.

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References

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2. Anil Kumar V. Phenotypic screening of resistance mechanism in *Staphylococcus aureus*. *Indian J Med Res* 2013;137 : 564-5.
3. Skov R, Smyith R, Larsen AR, Bolmstrom A, Karlsson A, Mills K, *et al*. Phenotypic detection of methicillin resistance in *Staphylococcus aureus* by disk diffusion testing and Etest on Mueller-Hinton agar. *J Clin Microbiol* 2006; 44 : 4395-9.