

# Laboratory detection of MRSA

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Sir,

The article brings to light an alarmingly high incidence of MRSA (88.9%). Considering the fact that phenotypic screening methods remain the backbone for detection of MRSA in clinical isolates (Babakir-Mina *et al.*, 2012), the authors fail miserably in performing these tests according to CLSI guidelines. This therefore questions the reliability of the data generated making them highly misleading.

The authors used 2 McFarland turbidity to perform the Kirby Bauer disc diffusion which is four times the CLSI recommended turbidity of 0.5 McFarland.

The study was done between 2008 and 2011 and the authors used 2007 CLSI guidelines for interpretation which are outdated and the results based on it are not relevant.

The incubation temperature for oxacillin disc diffusion (DD) is 33°C-35°C and not 37°C. Testing at temperatures above 35°C may not detect MRSA (CLSI, 2008). Oxacillin DD plates should be incubated for 24 hours before reading the zones of inhibition.

Oxacillin DD has a sensitivity of only 91% and specificity of only 58.9% while cefoxitin DD has a sensitivity and specificity of 97.8% and 100% respectively (Swenson *et al.*, 2007). CLSI recommends the use of the cefoxitin DD method for detection of MRSA.

The authors never made an effort to detect (erythromycin) inducible resistance to clindamycin which has immense clinical significance.

The authors never mention betalactamase testing for their isolates. The Nitrocefin disc test should have been used to test for betalactamases. Hyperproducers are resistant to oxacillin by disc diffusion resulting in false positive MRSA test results.

CLSI has done away with vancomycin DD and recommends only MIC testing (CLSI, 2008). Therefore the data presented on vancomycin susceptibility based on DD are not valid.

The title of the article is highly misleading as the vancomycin DD is no longer recommended for susceptibility testing and nitrofurantoin can only be used for treating urinary tract infection which formed only 0.4% of the isolates in the study.

## REFERENCES

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