Letter to Editor

Vancomycin-resistant *Staphylococcus aureus* in Nepal: an impending crisis?

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Dear Editor,

Emergence of Vancomycin Intermediate *Staphylococcus aureus* (VISA) and Vancomycin resistant *Staphylococcus aureus* (VRSA), though reported less frequently , is a serious matter of concern. It perhaps indicates the impending development and spread of VRSA posing the greatest risk to the patients and threat to the clinicians and microbiologists alike. Article by Chaudhary et al (2010) is interesting because it has brought out certain important findings to the scientific community in the Nepalese context from the microbiological perspective. This paper has reported VRSA, perhaps for the first time in Nepal and the proportion (18% VRSA, among the *S. aureus* isolates from the chronic dacryocystitis) is really alarming.

Dumre S is the main author of the related paper (Dumre et al, 2008) whose finding has been mentioned incorrectly in the paper by Chaudhary et al (2010). VRSA was not encountered in the study by Dumre et al but documented as "all the isolates were vancomycin resistant" by Chaudhary et al (2010). Lapses have occurred in citing the reference as well. SP Dumre is the first author of the paper, but Chaudhary et al have quoted S Malla as the first author. In addition, the year of publication in the text (2007) and in the list of references (2008) does not match (Chaudhary et al, 2010). Majority of the errors in citing the references are avoidable and it is the authors' responsibility to ensure that all citations are correct. Errors in referencing can be a source of frustration for the readers as it makes further search of the materials difficult whereas the concerned authors may consider it as a sign of disrespect (Adhikari, 2009). There is still scope for the amendment.

This work which was conducted in BP Koirala Lions Centre for ophthalmic Studies, Institute of Medicine, Kathmandu in collaboration with Central Department of Microbiology, Tribhuvan University, Kathmandu, Nepal has described the methodology of collection of specimen, isolation, identification and determination of antimicrobial susceptibility. However, methods for the antimicrobial susceptibility testing appear to be inadequate particularly for the Staphylococcal isolates. No reference is cited for the methods of antimicrobial susceptibility testing. Authors have not made an attempt to detect Methicillin resistant *Staphylococcus aureus* (MRSA) which in fact is recommended as part of routine testing for all Staphylococci (CLSI,2006).VISA were perhaps not looked for as they are not detected in disk susceptibility testing (CDC, 2010). Caution should have been taken before reporting VRSA on the basis of disk diffusion testing alone as no other methods were adopted for the confirmation of these VRSA isolates.CDC recommends additional methods (such as use of vancomycin screen agar plate) for those laboratories which use disk susceptibility testing for vancomycin (CDC, 2010).

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Antimicrobial resistance among Staphylococci has been the topic of intense research and discussion worldwide. Many studies published from Nepal indicate that strains of *S aureus* remain susceptible to vancomycin but exhibit various degree of resistance to methicillin (Baral et al, 2011; Dumre et al, 2008; Shrestha et al, 2009). The authors have concluded their finding without verifying or further processing of the isolates. Confirmation of vancomycin resistance by determination of minimum inhibitory concentration (MIC) and verification in the reference laboratory would have definitely added to the credibility of the results. This may still be undertaken if the isolates are preserved under appropriate conditions.

Emergence of VRSA in Nepal as reported in this study indicates a critical situation which requires an urgent response by the concerned authority in checking the further development and spread of these isolates. It also emphasizes a need of formulating guidelines for nationwide surveillance program.

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