Infection and Drug Resistance

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RESPONSE TO LETTER

"Is Fosfomycin As Effective As Claimed On MDR Gram-Negative Bacteria Causing UTI?" [Response To Letter]

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Dear editor

This is in response to the comments made by Singh et al 2019,[1] where they mentioned that we observed in our study titled " Invitro effect of fosfomycin on multidrug resistant Gram negative bacteria causing urinary tract infections" that fosfomycin was the most effective antibiotic inhibiting 100% *E.coli*, 70% *Klebsiella* sp., and 50% *Pseudomonas* sp. and 40% *Enterobacter* sp. isolates from UTIs. Earlier studies from India have also reported similar findings, viz. by Banerjee S et al,[2] Tulara NK et al.[3] Singh et al have reported that they observed 12.9% isolates of Gram negative bacteria (GNB) associated with UTIs in humans were susceptible to fosfomycin. The sample size for their study was small (N=50) and it is difficult to opine on the resistance patterns prevailing in their province as this data is neither representative, nor reflective of the same. Moreover, how they arrived at the sample size 50 has not been mentioned in their study. Also, the testing methodology used for fosfomycin was not explained. Though the reference has been mentioned for the same but they did not explain in detail as this is critical in the interpretation of a resistant and susceptible strain. Also the details about the content of the disc and the media, whether glucose- 6-phosphate had been added or not was not mentioned. This can affect the results tremendously. Use of ATCC control strains for validation were not mentioned in the study. According to CLSI disc diffusion and MIC break points apply only *E.coli* urinary isolates and should not be extrapolated to other species of *Enterobacteriaceae.*[4] The interpretation of disc diffusion zone diameter break points should be done according to the EUCAST guidelines otherwise it can lead to erroneous results.[5] This has not been done by the authors and neither have they referred to this document. Singh et al also reported 33% isolates of GNBs associated with UTIs in animals were susceptible to fosfomycin. As far as we are concerned we cannot extrapolate the results done on human isolates to animal isolates. Hence, the authors need to check the further guidelines for the testing of the animal isolates.

Disclosure

The authors report no conflicts of interest in this communication.

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