Comparative evaluation of 2 g single dose versus conventional dose azithromycin in uncomplicated skin and skin structure infections

Sir,

This letter is in context to the article published in your journal titled, “Comparative evaluation of 2 g single dose versus conventional dose azithromycin in uncomplicated skin and skin structure infections.”[1] I have certain queries regarding the methodology and conclusion of this article.

In this article, the researchers compared the efficacy of 2 g single dose azithromycin with that of conventional 5 days dose of azithromycin. The primary outcome measure in this study was clinical response characterized by cessation of spread of redness, edema, and induration around the lesion or reduction of the size of the lesion at 72 h. The investigators have reported that “this study was conducted to show the efficacy of single dose regimen…” However, the researchers also concluded on the basis of this study that “…single 2 g dose of azithromycin, given under supervision, is generally well-tolerated and can achieve clinical cure rates comparable to conventional azithromycin dosing within 7 days.” This conclusion drawn on the basis of this particular study is inappropriate as the design of this study was intended to test superiority of single dose regimen. However, the researchers also concluded on the basis of this study that “…single 2 g dose of azithromycin, given under supervision, is generally well-tolerated and can achieve clinical cure rates comparable to conventional azithromycin dosing within 7 days.” This conclusion drawn on the basis of this particular study is inappropriate as the design of this study was intended to test superiority of single dose regimen. However, the researchers also concluded on the basis of this study that “…single 2 g dose of azithromycin, given under supervision, is generally well-tolerated and can achieve clinical cure rates comparable to conventional azithromycin dosing within 7 days.” This conclusion drawn on the basis of this particular study is inappropriate as the design of this study was intended to test superiority of single dose regimen.

In this article, the single dose and conventional dose group are not significantly different from each other for primary end-point. However, as nonsignificant P values cannot prove the null hypothesis, on the basis of this study, it cannot be said that both drugs are equally effective. In addition, the conclusion drawn by the authors that “the difference in treatment adherence was highly significant (P < 0.001) in favor of the single dose arm” is highly influenced by observer bias as the 2 g single dose of azithromycin was taken in direct supervision of the observers which is bound to result in 100% adherence in this group. Furthermore, the feasibility of such observed treatment remains doubtful in actual clinical scenario.

Financial Support and Sponsorship
Nil.

Conflicts of Interest
There are no conflicts of interest.

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References
1. Dey SK, Das AK, Sen S, Hazra A. Comparative evaluation of 2 g single dose versus conventional dose azithromycin in uncomplicated skin and skin structure infections. Indian J Pharmacol 2015;47:365-9.
2. Jaykaran D, Saxena D, Yadav P, Kantharia ND. Nonsignificant P values cannot prove null hypothesis: Absence of evidence is not evidence of absence. J Pharm Bioalied Sci 2011;3:465-6.

DOI: 10.4103/0253-7613.174577