

LETTER

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Dose of colistin: a work in progress?

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See related letters by Rashid et al., <http://ccforum.com/content/18/1/401>, and Honoré et al., <http://ccforum.com/content/18/1/412>, and related research by Rocco et al. <http://ccforum.com/content/17/4/R174>

We thank Rashid and colleagues [1] and Honoré and colleagues [2] for their comments regarding our article on risk factors for acute kidney injury in patients receiving colistin or other nephrotoxic antimicrobials [3].

It is correct that we did not specifically report urine output in the text, but it was obviously included in the RIFLE (Risk, Injury, Failure, Loss of kidney function, and End-stage kidney disease) criteria reported in Table two [3].

We agree that the colistin methanesulfonate pharmacokinetics have been better studied recently, and it has become clear that high doses are required for treating multidrug-resistant Gram-negative bacilli infection, including the loading dose (which has changed from 4 to 9 million IU) and the dose interval (which has changed from three to two times a day) [4]. We agree with the authors' concerns about the adequacy of colistin dosages adopted in our cohort (130,000 IU/kg of ideal body weight, modified according to renal function), but these doses were commonly adopted, especially in patients with renal impairment [5]. Indeed, the development of new high-performance liquid chromatography assays that allow clinicians to measure the concentrations of colistimethate and colistin separately has shown that colistin clearance is due mainly to non-renal mechanisms that are still unclear. It is of great interest to note, as reported recently by Honoré and colleagues [6], that patients with multidrug-resistant infections can receive even higher doses of colistin during continuous renal replacement therapy, as colistin methanesulfonate is continuously filtered and absorbed by dialysis membrane [7]. Hence, even higher doses may be needed in patients receiving continuous renal replacement therapy than in patients with normal renal function. The growing evidence in

favor of a higher dosage of colistin requires further clinical studies.

Competing interests

The authors declare that they have no competing interests.

Published online: 16 February 2015

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