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Letter to the Editor

Which tobramycin dose is needed in the burn patient?

Sir,

We read with interest the paper of Bracco [1] about pharmacokinetic of tobramycin in burned patients. We strongly agree with the need for systematic monitoring of serum aminoglycosides concentrations, and for following regimen optimization.

However, we are puzzled by a so low targeted concentration (i.e. 8 mg l^{-1}) of tobramycin. According to the French Microbiology Society guidelines [2] the break point for bacteria susceptibility (MIC) is 2 mg l^{-1} and specifically 4 mg l^{-1} for *Pseudomonas aeruginosa*. Therefore, the targeted concentration would be at least 20 mg l^{-1} (i.e. C_{max}/MIC of 10) at the actual peak (i.e. 30 mn after administration) for effective treatment [3] even if one thinks that this level is inadequate for elimination half-life calculation.

In our experience of systematic monitoring of serum antibiotics concentration [3] in a group of 88 patients, this concentration is only achieved with a dose of 9 mg kg^{-1} once daily. A 5 mg kg^{-1} dose, as recommended by the authors, only allows a serum level under 15 mg kg^{-1} [4].

As aminoglycosides must be used in life threatening diseases for quick bacteria eradication, one has to give aminoglycoside before antibiotic susceptibility and MIC results. We think, as recommended by the French Society for Burns Studies and Treatment [5] that the effective first dose of tobramycin is 10 mg kg^{-1} once daily. After determination of the actual MIC and serum concentration, the administration regimen must be fitted.

Conflict of interest

None declared.

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Letter to the Editor

Response to letter to the editor: "Which tobramycin dose is needed in the burn patient?"

Sir

We read with interest the comment by Dr Arnould regarding our paper on the pharmacokinetic of tobramycin in severely burn patients. We agree with the authors that a Cmax/MIC of 10 or above is suitable to rapidly reduce the inoculum of pseudomonas.

Aminoglycosides should no more be used alone in the treatment of Gram-negative infections [1,2]. They have a bad toxicity profile, and most interest of combination