Sir,

We read with great interest the case report by Joson et al., in which they describe the successful treatment of methicillin-resistant Staphylococcus aureus (MRSA) mitral valve endocarditis with sequential linezolid and telavancin monotherapy following daptomycin failure. However, we would like to comment on the antimicrobial course and dosing.

This report relates to a case of bacteraemia that was probably consecutive to a complicated skin and soft tissue infection, further complicated by mitral valve endocarditis and paraspinal abscess.

First of all we are surprised by the initial choice of vancomycin as first-line treatment, without drug monitoring, taking into consideration the patient’s severely impaired renal function. Daptomycin, being non-nephrotoxic, may have been a reasonable consideration for the patient’s severely impaired renal function. Daptomycin, being non-nephrotoxic, may have been a reasonable consideration for the patient’s severely impaired renal function.

In the case report it appears that daptomycin was initially underdosed for bacteraemia treatment according to the FDA summary product characteristics (6 mg/kg/48 h) and also according to expert opinion (8–10 mg/kg) as mentioned in the IDSA guidelines. Linezolid, a bacteriostatic agent non-recommended for complicated endocarditis, has the potential to increase haematological toxicity in renally impaired patients, as illustrated in the case report. Telavancin, also non-approved for endocarditis, carries the risk of renal toxicity, similar to vancomycin.

So the eventual choice of daptomycin seems appropriate; however, the case report illustrates the consequence of an escalation strategy for MRSA susceptibility.

On the basis of our experience, to treat MRSA endocarditis or bacteraemia we usually use daptomycin as first-line therapy at 10 mg/kg/day because of its rapid and powerful bactericidal effect, non-nephrotoxicity and linear pharmacokinetics. For renally impaired patients, we monitor trough concentrations and administer daptomycin every 48 h if the trough is higher than 20 mg/L.

Keywords: antibacterials, septic shock, endocarditis

References

Comment on: Successful treatment of methicillin-resistant Staphylococcus aureus mitral valve endocarditis with sequential linezolid and telavancin monotherapy following daptomycin failure

Fabrice Camou*

Medical Intensive Care Unit, Saint Andre Hospital, Bordeaux, France

Tel: +33556795830; Fax: +33556794771; E-mail: fabrice.camou@chubordeaux.fr

Keywords: antibacterials, septic shock, endocarditis

Transparency declarations
F. C. has received funding or honoraria for lectures, conference attendance or consultancy from Janssen, Novartis and Pfizer.