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## Answer to the article: “*Serratia marcescens* bacteraemia outbreak in hemodialysis”. Comment on “*Serratia marcescens* bacteraemia outbreak in haemodialysis patients with tunnelled catheters due to colonisation of antiseptic solution. Experience at 4 hospitals”<sup>☆</sup>

### Respuesta al artículo: «Brote de bacteriemia por *Serratia marcescens* en hemodiálisis». Comentarios al artículo: «Brote de bacteriemia por *Serratia marcescens* en pacientes portadores de catéteres tunelizados en hemodiálisis secundario a colonización de la solución antiséptica. Experiencia en 4 centros»

Dear Editor,

We appreciate the interest generated by the publication of the event that occurred in our hospitals. Although our article mentions the findings from only 4 sites, we are aware that it was a situation experienced at national level.<sup>1</sup> Even within the same region of Madrid, other hospitals have also presented their experience.<sup>2</sup>

In this issue of *Nefrología*, González Sanchidrián et al.<sup>3</sup> describe the progress of their patients, showing outcomes similar to ours. As they rightly explain, the most critical aspect was the rapid detection of the presence of an atypical microor-

ganism as the cause of the complication. This set in motion the safety mechanisms present in all hospitals, with special emphasis on the importance of the involvement of the preventive medicine departments.<sup>4</sup>

This type of microorganism – although described as an agent of epidemic outbreaks – is rare in the colonisation of dialysis catheters.<sup>5,6</sup> The presence of more than one patient affected in such a short period of time should be considered as potentially high risk, and a common origin must be investigated. All the affected hospitals made reasonable efforts to detect the origin of the microorganism, and the problem was solved once the focus had been confirmed. The presence of the antiseptic (source of infection) in all cases and its

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verification in the samples sent for examination enabled the correct identification of the focus.

From a practical point of view, most centres started empirical treatment with broad spectrum antibiotic cover, readjusting the final treatment according to the antibiotic susceptibility testing results. In general, the sealing of the catheter was a common procedure to eliminate the possibility of the biofilm acting as a reservoir.

In our experience, the need to catheter removal was minimal, despite a high rate of occurrence. Current guidelines on vascular access establish risk factors that indicate catheter removal, in some patients this decision is critical since it, may be the last vascular access available.<sup>7,8</sup> With the different treatment regimens adopted in our hospitals, none of the catheters had to be removed, no major complications were observed, and there were no deaths for this reason during follow-up. The rate of catheter removal was greater in other hospitals, probably determined by the severity of symptoms and difficulty in identifying the focus of infection.

Finally, although it is not the aim of the study, it is important to emphasise the importance of tunnelled catheter as a clearly differentiated risk factor of morbidity and mortality. Although their use may be unavoidable in a significant number of patients, due to different conditions, this should not be an impediment for initiating all possible strategies to minimise their use. Collaboration between radiology, vascular surgery and nephrology departments is crucial so that tunnelled catheters are used only when strictly necessary.<sup>9</sup>

These atypical situations challenge our safety protocols and measures in our routine clinical practice. Vigilance and re-evaluation of our protocols are key for minimising the consequences of unexpected complications. The initiative to recruit the experience of all the national centres affected would be particularly relevant, and it could help to understand an exceptional, but potentially significant, phenomenon.

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