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Reply to Filiopoulos et al

To the Editor—I wish to thank Filiopoulos et al[1] for their thoughtful comments regarding my recent article dealing with prevention of central line–associated bloodstream infection (CLABSI) in patients receiving hemodialysis.[2] The authors point out that their study, cited in Table 3 of my review article, was summarized in a somewhat confusing manner. I referred to their study as an observational one. In fact, Filiopoulos et al[1] randomized 60 patients to receive gentamicin-heparin and 59 patients to receive taurolidine-citrate.[3] However, unlike a number of other recently conducted randomized controlled trials that involved contemporary controls, the Filiopoulos et al[1] trial compared patients who received the 2 new study regimens with 58 historical control subjects.

The authors also state, "Boyce recommended the use of either gentamicin in 4% sodium citrate or a combination of sodium citrate–methylene blue–propylparaben as antimicrobial lock solutions, although no supporting data from the literature were provided."[1(pXXX)] On the contrary, the randomized controlled trials by Moran et al[4] and by Maki et al,[5] cited in Table 3, provide supporting evidence for the use of gentamicin-citrate and sodium citrate–methylene blue–propylparaben, respectively. I agree with the statement by Filiopoulos et al[1] that the ideal antimicrobial lock solution has not been identified to date, because *several effective regimens have not been compared in head to head trials*.

The authors go on to state that recent reviews appeared to advocate the use of lock solutions containing low concentrations of citrate in conjunction with taurolidine as the best choice at the moment and cite articles by Betjes[6] and by Lok et al.[7] It is true that Betjes,[6] whose article was published online before the studies by Moran et al[4] and Maki et al,[5] stated that such combinations are theoretically the best choice at the moment, despite the fact that they have not been widely used and questions remain regarding their efficacy. However, the article by Lok et al[7] does not make such a claim and points out that several recent trials using such combinations found no difference in the time to first CLABSI and that increasing use of thrombolytic therapy has been reported with the combination of citrate-taurolidine. Lok et al[7] did mention that other novel antimicrobial lock solutions are promising and cited articles dealing with sodium citrate–methylene blue–propylparaben, ethanol, and ethanol-citrate. Finally, I agree with Filiopoulos et al[1] that additional comparative studies are needed to identify the ideal lock solution.

John M. Boyce, MD[1,2]

Affiliations: 1. Director, Hospital Epidemiology and Infection Control, Yale-New Haven Hospital, New Haven, Connecticut; 2. Clinical Professor of Medicine, Yale University School of Medicine, New Haven, Connecticut.
Address correspondence to John M. Boyce, MD, Hospital Epidemiology and Infection Control, Yale-New Haven Hospital, 20 York Street, New Haven, CT (john.boyce@ynhh.org).

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