Correspondence

Infectious Diseases Consultation and the Management of *Staphylococcus aureus* Bacteremia

To the Editor—*Staphylococcus aureus* bacteremia (SAB) remains a morbid and often mortal infection. The recent article by López-Cortés et al [1] demonstrated a reduction in mortality when a bundle of interventions were used in conjunction with evidence-based standards of care for SAB management. We recently reviewed our experience with the influence of infectious diseases consultations on SAB management and outcomes, and our results reinforce many of the interventions advocated by López-Cortés, as well as those of previous studies demonstrating the benefit of infectious diseases consultation in the management of SAB [2–9].

We systematically reviewed all 191 SABs at our medical center during 2011 to evaluate whether infectious diseases consultation affected crude mortality. We also recorded the type and duration of antibiotic, whether follow-up blood cultures and echocardiography were performed, whether a focal source was present, and whether the focal source, if present, was removed. Fourteen of 191 bacteremic patients were excluded from our analysis because they died or were discharged or transferred within 48 hours after the diagnosis of SAB. Statistical analyses were performed with SPSS software and Microsoft Excel software, with continuous and nominal data evaluated with the Student *t* test and the χ^2 test, respectively.

Results for the 177 evaluable patients, 142 of whom had an infectious diseases consult for the management of SAB, are shown in Table 1. Patients who received an infectious diseases consult were more likely to have follow-up blood cultures, have a focal source removed, and undergo echocardiography. The duration of therapy was more than double (27 vs 12.5 days) and the crude mortality was significantly lower (20% vs 7%; $P = .02$) in the group that received an infectious diseases consultation, compared with the group that did not. Attributable mortality was also lower among patients who received an infectious diseases consultation, compared with patients who did not (6% vs 11%), but the difference was not statistically significant ($P = .3$). The antibiotics used did not differ between the 2 groups: almost all SABs due to methicillin-resistant isolates were treated with vancomycin or daptomycin, and almost all SABs due to methicillin-susceptible isolates were treated with either nafcillin or (occasionally) ceftriaxone.

Table 1. *Staphylococcus aureus* Bacteremia Characteristics and Outcomes, by Infectious Diseases Consultation Status

Variable	ID Consultation (n = 142)	No ID Consultation (n = 35)	*P*
Organism			
MRSA	78 (55)	12 (34)	
Follow-up blood cultures	132 (93)	21 (60)	.001
Focal source present	106 (73)	22 (63)	.16
Focal source removed/drained	77 (79)	7 (47)	.005
Echocardiography	105 (74)	13 (37)	.001
Therapy duration, d, median	27	12	.02
Crude mortality	10 (7)	7 (20)	.02
Attributable mortality	9 (6)	4 (11)	.30

Data are no. (%) of patients, unless otherwise indicated.

Abbreviations: ID, infectious diseases; MRSA, methicillin-resistant *Staphylococcus aureus*.

These data support use of the bundle advocated by López-Cortés et al [1] and are consistent with multiple recent publications demonstrating improved outcomes and adherence to best practices when SAB management is guided by an infectious diseases consultant [2–9]. The duration data may be the most critical: SAB treatment durations of <14 days are clearly inadvisable, even for uncomplicated SAB [10].

Certain physician groups at our medical center had resisted mandatory infectious diseases consults for SAB, prompting this retrospective review. After we presented these data to the medical staff, infectious consultation for SAB became mandatory at our institution. The bundle advocated by López-Cortés et al likely improves practices for and outcomes of SAB by using interventions routinely recommended during infectious diseases consultation for this condition.

Note

Potential conflicts of interest. All authors: No reported conflicts.

All authors have submitted the ICMJE Form for Disclosure of Potential Conflicts of Interest. Conflicts that the editors consider relevant to the content of the manuscript have been disclosed.

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