## CORRESPONDENCE

## The Role of *Staphylococcus aureus* in *Clostridium difficile* Toxin–Negative Nosocomial and Antibiotic-Associated Diarrhea

Previous studies have implicated Staphylococcal enterocolitis as a significant etiologic agent of nosocomial and antibiotic-associated diarrhea (AAD) as early as the 1950s.<sup>1</sup> Since then, the role of *Staphylococcus aureus* has been overshadowed by the emergence of *Clostridium difficile* as the most common cause of AAD, accounting for up to 33% of cases.<sup>2</sup> Several publications have re-examined the role of *S. aureus* in *C. difficile* toxin–negative acute colitides.<sup>2-4</sup> Our research goal was to investigate the magnitude of this role in our community hospital setting.

Stool samples from patients being tested for *C. difficile* toxin were also cultured for *S. aureus* on blood agar plates for 24 hours. The decision to obtain assays for *C. difficile* was based on a clinical suspicion of nosocomial diarrhea secondary to antibiotics. Patient charts were retrospectively reviewed to gather pertinent data.

Sixty-eight patients were studied. Although the incidence of *C. difficile* toxin positivity in this sample was 13%, there were no cases of acute colitis associated with *S. aureus*.

Staphylococcal enterocolitis remains a rare, yet dangerous, cause of *C. difficile* toxin–negative nosocomial diarrhea and AAD.<sup>1</sup> In our community hospital setting, we found no cases of *S. aureus* colitis in a sample population of 68 patients. However, this finding does not preclude its being an etiologic agent in AAD in selected subsets of patients, such as children or patients who are severely immunocompromised,

such as those on chemotherapy, organ transplantation patients, or patients with HIV/AIDS.

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