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Characteristics of *Staphylococcus aureus* Community-Acquired Pneumonia during the 2006–2007 Influenza Season

TO THE EDITOR—The article by Gillet et al. [1] presented an interesting case series of *Staphylococcus aureus* pneumonia that spanned 20 years. The Infectious Diseases Society of America's Emerging Infections Network (EIN) has recently completed a survey that we believe adds to this discussion. The survey, distributed during spring 2007 to EIN members, asked about episodes of severe *S. aureus* community-acquired pneumonia (CAP) diagnosed during the recent influenza season (November 2006 through mid-March 2007). Severe CAP was defined as “pneumonia requiring hospitalization of an outpatient not residing in a long-term care facility.” Overall, 509 (47%) of 1083 members responded; 154 (30%) reported treating a

total of 440 adults and 117 children (age, <18 years) who were hospitalized because of *S. aureus* CAP. Of these patients, 267 (49%) required mechanical ventilation, and 67 (13%) died. These rates are lower than the rates reported by Gillet et al. [1] (in that report, 78% required mechanical ventilation, and 56% died in the hospital), potentially because of differences in case ascertainment. In the EIN survey, respondents suspected that 26% of case patients had an associated influenza infection, on the basis of history or clinical findings, and 6% of case patients had laboratory-confirmed influenza. Also of note, 77% of cases reported in the EIN survey had a positive *S. aureus* sputum culture result, whereas ~43% had a positive *S. aureus* blood culture result, findings that suggest that sputum cultures have diagnostic utility.

Whereas Gillet et al. [1] reported that 6 (12%) of their 50 isolates were methicillin resistant, physicians in our survey reported that 386 (72%) of their cases were caused by methicillin-resistant *S. aureus* (MRSA). Although this likely involves some reporting bias, it does suggest that MRSA might be causing an increasing proportion of cases of CAP in the United States, similar to what has been reported for staphylococcal skin infections [2]. Vancomycin, given either alone or paired with another antimicrobial agent, was the empirical treatment for severe CAP that was preferred by most (73%) of the physicians in our survey, when coverage for MRSA was desired. Linezolid was preferred by 22% of our respondents. Both of these are recommended options in the recently updated CAP treatment guidelines for adults [3].

Although this survey has some limitations, including the potential of recall bias, it does bring to light some potentially important points that complement the report by Gillet et al. [1]. First, further work is needed to clarify the incidence of *S. aureus* and MRSA CAP, especially in light of the high mortality rate that has been de-

scribed by other authors, including Gillet et al. [1] and Hageman et al. [4]. A second issue in need of clarification is the role of *S. aureus* in non-influenza-associated CAP. Finally, the high proportion of MRSA cases among all *S. aureus* CAP cases reported in the EIN survey supports the growing concern that this organism could be playing a greater role in CAP, which could have implications for selection of empirical therapy.

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