Response: Re: Trimethoprim-sulfamethoxazole or Clindamycin for Community-Associated MRSA (CA-MRSA) Skin Infections

To the Editor: We thank Khawcharoenporn for his comments regarding our recent study involving patients with CA-MRSA skin and soft tissue infections (SSTIs).[1] This study includes a subgroup analysis of patients who received incision and drainage (I&D) alone versus I&D plus antibiotics (94% received trimethoprim-sulfamethoxazole or clindamycin). Retrospective, observational studies like ours are potentially subject to selection bias; however, a comparison of baseline characteristics revealed no significant differences in age, sex, Hispanic ethnicity, insurance status, diabetes, hypertension, hyperlipidemia, coronary artery disease, obesity, depression, HIV, hepatitis C, tobacco use, alcohol use, intravenous drug use, history of skin infection, or baseline pain score for patients who received I&D alone or I&D plus antibiotics. Nevertheless, unmeasured variables, including disease severity, could partially account for the outcomes differences we observed between these 2 groups.

We could not determine disease severity retrospectively because of a lack of information regarding lesion characteristics like size, depth, and number. Novel severity scoring systems, such as the one developed by Khawcharoenporn and Tice[2] for cellulitis, potentially are useful for patient care and in clinical research. The challenge in applying such rules is that the requisite information (eg, white blood cell count) may not be part of the routine work-up for outpatients with SSTIs. Furthermore, there is a clear need to develop and validate such a rule among a cohort of patients with skin abscesses because these are a common type of CA-MRSA infection.[3]

Khawcharoenporn also refers to a randomized, controlled trial by Rajendran et al.[4] This study is frequently cited as evidence that antibiotics are unnecessary in uncomplicated SSTIs. The study was actually a double-placebo trial because neither placebo nor cephalexin has activity against MRSA. Success rates were similar and high in both groups; therefore, the authors concluded that this study provides "strong evidence that antibiotics may be unnecessary after surgical drainage of uncomplicated skin and soft tissue abscesses caused by community strains of MRSA." We applaud the strong study design; however, the conclusion overstates the findings, given that MRSA is responsible for 60% of community-associated SSTIs and neither of the study arms included antibiotics with activity against CA-MRSA.[5]

The real question is whether or not I&D plus active therapy is any better than I&D alone or I&D plus cephalexin. Our retrospective cohort study demonstrates patients who were treated with I&D plus active antibiotics fared better than those treated with I&D alone ($P = .03$). Khawcharoenporn and Tice[2] provide additional evidence from a separate retrospective cohort study that demonstrated trimethoprim-sulfamethoxazole was superior to cephalexin in outpatients with cellulitis ($P < .001$); 28% of patients in both groups received I&D. Clindamycin was also better than cephalexin in a subset of more severe cellulitis infections ($P = .03$). Though neither of these retrospective studies is the definitive answer on the matter, together they suggest I&D plus active therapy against MRSA generally should be preferred to I&D alone or I&D plus cephalexin in outpatients who are being treated for MRSA SSTIs. This is consistent with physician attitudes regarding the management of simple abscesses. A recent national survey of 207 board-certified emergency department physicians found that 80% would sometimes or always prescribe antibiotics in addition to I&D for simple abscesses; 81% of those who endorsed adjunctive antibiotics preferred antibiotics with MRSA activity.[6]

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