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Methicillin-resistant *Staphylococcus aureus* Skin Infections

To the Editor: Moran et al. write, "In areas with a high prevalence of CA-MRSA [community acquired methicillin-resistant *Staphylococcus aureus*], empiric treatment for skin and soft tissue infections (SSTIs) with β-lactam agents such as cephalexin may no longer be appropriate. Oral agents such as clindamycin or trimethoprim/sulfamethoxazole and rifampin should be considered in CA-MRSA" (1). However, some studies have had different results. Lee et al. reported that 31 (84%) of 37 Texas children with CA-MRSA SSTIs showed clinical improvement after incision and drainage, even though they received an "ineffective" antimicrobial agent that was not changed after the susceptibility results became available (2). These researchers also reviewed some reports with similar experience in the United States and further suggested that incision and drainage without adjunctive antimicrobial therapy were effective in immunocompetent children for CA-MRSA SSTIs <5 cm in diameter.

Several studies on Taiwanese children with CA-MRSA SSTIs agree with the viewpoint of Lee et al. Chen and colleagues reported that 22 (63%) of 35 episodes of CA-MRSA superficial soft tissue infections in children were cured by nonsusceptible antimicrobial therapy, regardless of surgical intervention (3). In a study by Wang et al., oxacillin, with or without incision and drainage, was effective in 16 (89%) of 18 children with CA-MRSA SSTIs, even in a case with high-level oxacillin resistance (MIC≥8 μg/mL) (4). Fang et al. also reported that 16 (55%) of 29 children with CA-MRSA SSTIs were eventually cured with therapy to which their infections were not susceptible (5). With these experiences and concerns about the growing problem of bacterial resistance, we suggest that incision and drainage, with or without adjunctive antimicrobial therapy, are adequate to treat noninvasive CA-MRSA SSTIs in immunocompetent children and that oxacillin or first-generation cephalosporins are still effective and sufficient under such conditions. Vancomycin and other agents that are effective against MRSA isolates should be reserved for invasive CA-MRSA infections or for immunocompromised patients. Although Moran's study was focused on adults, not on children as these studies were, we believe these suggestions are also appropriate when applied to CA-MRSA SSTIs in adults.

Finally, the antibiogram of CA-MRSA isolates may vary from country to country. In Taiwan, CA-MRSA isolates are also resistant to multiple antimicrobial agents; 71.4%, 91.4%, and 41.2% are resistant to clindamycin, erythromycin, and chloramphenicol, respectively (4). Trimethoprim/sulfamethoxazole is more effective against CA-MRSA isolates than

other first-line antimicrobial agents: the resistance rate is 0%–65.7% (4,5). Therefore, clindamycin and trimethoprim/sulfamethoxazole may be not adequate empiric antimicrobial agents for SSTIs in Taiwan or other areas with a high prevalence of CA-MRSA.

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In response: Dr Ma makes an excellent point about the limitations of study data on antimicrobial drug treatment of skin abscesses (1). All of the patients described in our study (2) required antimicrobial drug therapy, and most were admitted to the hospital. However, we did not mean to imply that all skin abscesses require antimicrobial drug treatment. Our own practice is to give antimicrobial drug therapy only when a skin abscess is associated with definite surrounding cellulitis, systemic signs, or both. Although various criteria have been published, in practice this is a judgment call, and we suspect that physicians vary considerably in use of antimicrobial agents for skin infections.

Because most cellulitis associated with skin abscess will improve with adequate drainage, designing a study that will find a difference in outcome attributable to the antimicrobial drug is difficult. More studies are needed to determine whether antimicrobial agents with in vitro activity against methicillin-resistant *Staphylococcus aureus* (MRSA) are more clinically effective than those lacking such activity. Perhaps these studies should focus on those infections for which antimicrobial agents would be expected to have the greatest impact (e.g., infected wounds with cellulitis), rather than abscesses that can be expected to improve with incision and drainage alone.

When the decision is made to use an antimicrobial agent, it is difficult to justify choosing one to which the infecting organism will likely be resistant. Because MRSA is now the most common cause of skin infections at our institution, we choose agents with activity against the MRSA strains in our community. We do not believe that choosing an antimicrobial agent to which the infecting organism is susceptible is more likely to contribute to the general problem of antimicrobial drug resistance.

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Angiostrongyliasis, Mainland China

To the Editor: The first case of angiostrongyliasis caused by *Angiostrongylus cantonensis* in mainland China was reported in 1984; only 3 cases were reported between then and 1996 (1). Recently, however, cases of angiostrongyliasis have increased rapidly because of its natural focus and a change in human dietary patterns. For example, snails have become a popular food in many regions of this country. Nearly 100 cases of angiostrongyliasis have been reported in mainland China, including 2 outbreaks (2,3).

From 1994 to 2003, 84 cases of angiostrongyliasis were documented in mainland China. Of all the cases, 29 were reported individually, and 55 were reported from the 2 outbreaks that occurred in Zhejiang and Fujian. Sixty-three of the 84 patients had eaten raw or undercooked snails, 5 had eaten raw crabs, 1 swallowed tadpoles, and several pediatric patients had close contact with snails. Some researchers believe that the larvae of *A. cantonensis* can be released from mollusks into slime fluid and contam-