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Clindamycin versus Trimethoprim–Sulfamethoxazole for Uncomplicated Skin Infections

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ABSTRACT

BACKGROUND

Skin and skin-structure infections are common in ambulatory settings. However, the efficacy of various antibiotic regimens in the era of community-acquired methicillin-resistant *Staphylococcus aureus* (MRSA) is unclear.

METHODS

We enrolled outpatients with uncomplicated skin infections who had cellulitis, abscesses larger than 5 cm in diameter (smaller for younger children), or both. Patients were enrolled at four study sites. All abscesses underwent incision and drainage. Patients were randomly assigned in a 1:1 ratio to receive either clindamycin or trimethoprim–sulfamethoxazole (TMP-SMX) for 10 days. Patients and investigators were unaware of the treatment assignments and microbiologic test results. The primary outcome was clinical cure 7 to 10 days after the end of treatment.

RESULTS

A total of 524 patients were enrolled (264 in the clindamycin group and 260 in the TMP-SMX group), including 155 children (29.6%). One hundred sixty patients (30.5%) had an abscess, 280 (53.4%) had cellulitis, and 82 (15.6%) had mixed infection, defined as at least one abscess lesion and one cellulitis lesion. *S. aureus* was isolated from the lesions of 217 patients (41.4%); the isolates in 167 (77.0%) of these patients were MRSA. The proportion of patients cured was similar in the two treatment groups in the intention-to-treat population (80.3% in the clindamycin group and 77.7% in the TMP-SMX group; difference, –2.6 percentage points; 95% confidence interval [CI], –10.2 to 4.9; $P=0.52$) and in the populations of patients who could be evaluated (466 patients; 89.5% in the clindamycin group and 88.2% in the TMP-SMX group; difference, –1.2 percentage points; 95% CI, –7.6 to 5.1; $P=0.77$). Cure rates did not differ significantly between the two treatments in the subgroups of children, adults, and patients with abscess versus cellulitis. The proportion of patients with adverse events was similar in the two groups.

CONCLUSIONS

We found no significant difference between clindamycin and TMP-SMX, with respect to either efficacy or side-effect profile, for the treatment of uncomplicated skin infections, including both cellulitis and abscesses. (Funded by the National Institute of Allergy and Infectious Diseases and the National Center for Advancing Translational Sciences, National Institutes of Health; ClinicalTrials.gov number, NCT00730028.)

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