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Empiric antimicrobial therapy for pediatric skin and soft-tissue infections in the era of methicillin-resistant Staphylococcus aureus.

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OBJECTIVE: The goal was to compare the clinical effectiveness of monotherapy with beta-lactams, clindamycin, or trimethoprim-sulfamethoxazole in the outpatient management of nondrained noncultured skin and soft-tissue infections (SSTIs), in a methicillin-resistant Staphylococcus aureus (MRSA)-endemic region.

METHODS: A retrospective, nested, case-control trial was conducted with a cohort of patients from 5 urban pediatric practices in a community-acquired MRSA-endemic region. All subjects were treated as outpatients with oral monotherapy for nondrained noncultured SSTIs between January 2004 and March 2007. The primary outcome was treatment failure, defined as a drainage procedure, hospitalization, change in antibiotic, or second antibiotic prescription within 28 days.

RESULTS: Of 2096 children with nondrained noncultured SSTIs, 104 (5.0%) were identified as experiencing treatment failure and were matched to 480 control subjects. Compared with beta-lactam therapy, clindamycin was equally effective but trimethoprim-sulfamethoxazole was associated with an increased risk of failure. Other factors independently associated with failure included initial treatment in the emergency department, presence or history of fever, and presence of either induration or a small abscess.

CONCLUSIONS: Compared with beta-lactams, clindamycin monotherapy conferred no benefit, whereas trimethoprim-sulfamethoxazole was associated with an increased risk of treatment failure in a cohort of children with nondrained noncultured SSTIs who were treated as outpatients. Even in regions with endemic community-acquired MRSA, beta-lactams may still be appropriate, first-line, empiric therapy for children presenting with these infections.

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