# Clinical Capsules

**OTC Drugs Don't Stop DTaP Reactions**

Neither acetaminophen nor ibuprofen had a significant preventive effect against localized reactions to the fifth dose of the diphtheria-tetanus-acellular pertussis vaccine based on data from 372 children aged 4-6 years. Dr. Lisa A. Jackson of the University of Washington, Seattle, and her colleagues conducted a randomized, blinded controlled trial within a larger safety study of the Tripedia DTaP vaccine. Dr. Jackson has served on the speakers' bureau for Sanofi Pasteur, which manufactures the vaccine and provided a research grant for the study (Pediatrics 2006;117:620-5). The children were assigned to receive their first dose of 15 mg/kg of acetaminophen, with a maximum dose of 450 mg; 10 mg/kg of ibuprofen, with a maximum dose of 300 mg; or a placebo 2 hours before their scheduled vaccinations. The second and third doses were given at 6-hour intervals after vaccination, although an interval of up to 12 hours between consecutive doses was allowed. Overall, 90% of parents reported giving their children all three doses, and 70% reported giving all doses on schedule. Local reactions with an area of redness at least 2.5 cm in size occurred in 43% of the children. In addition, 49% reported some pain in the vaccinated limb and 23% reported some itching in the vaccinated limb during the 2 days after vaccination. However, the intent-to-treat analysis showed no significant differences in outcomes in either treatment group, compared with the placebo group. Although acetaminophen was given every 6 hours for study consistency rather than at the minimal recommended dosing interval of 4 hours, the results suggest that more frequent dosing would be unlikely to reduce the risk of local reactions, the investigators noted.



**Shunts, MRSA, Chills ID Bacteremia**

Three clinical characteristics—shunts or grafts, history of methicillin-resistant *Staphylococcus aureus*, and the presence of chills—were significantly associated with *S. aureus* bacteremia in a study of 1,015 patients, Dr. Zeina A. Kanafani reported in a poster presented at the annual meeting of the Interscience Conference on Antimicrobial Agents and Chemotherapy. The findings may facilitate earlier detection of infection and encourage the timely initiation of antibiotics in bacteremic patients, noted Dr. Kanafani and her colleagues at Duke University Medical Center in Durham, N.C. Data were collected from hospitalized patients aged 18 years and older with fevers of at least 38° C who underwent blood cultures between December 2003 and December 2004. A total of 235 patients (23%) had positive blood cultures; 76 were excluded from the study due to possible culture contamination. Of the remaining 159 patients (16% of the original patient population), 78 had *S. aureus* bacteremia; the other 81 patients grew organisms including *Candida* species, *Enterococcus* species, and *Bacteroides* species. Overall, 15 (19%) of patients with *S. aureus* bacteremia had histories of *S. aureus* infection, compared with 42 (5%) of the 780 patients whose blood cultures were negative for bacteremia. In addition, 25 (32%) bacteremia patients had an arteriovenous shunt or graft, compared with 74 (10%) of the culture-negative patients, and 34 (44%) of the bacteremia patients suffered from chills, compared with 126 (16%) of the culture-negative patients. In a subgroup of 829 nonhemodialysis patients, 45 (5%) had *S. aureus* bacteremia, and these patients were significantly more likely to have a tunneled-cuff catheter and a history of methicillin-resistant *S. aureus*. The meeting was sponsored by the American Society for Microbiology.

**Oral Nystatin Cuts *Candida* Risk**

A medical practice intervention reduced the incidence of *Candida* species from 36% among 45 control neonates admitted between Jan. 1, 1995, and June 30, 1996, to 6% among 69 neonates admitted between July 1, 1996, and December 31, 1998, said Dr. Maliha J. Shareef in a poster presented at the annual meeting of the Midwest Society for Pediatric Research. The intervention included administration of oral nystatin every 6 hours for the first week of life, and as an accompaniment to each antibiotic course during the first 4 weeks, wrote Dr. Shareef of St. Francis Medical Center, Peoria, Ill. Modification of parameters for early extubation, early discontinuation of central lines, and use of parenteral nutrition and antibiotics use also were part of the intervention. The study included neonates weighing 750 g or less at birth, who were admitted to a neonatal ICU within the first week of life. A retrospective analysis revealed that the intervention group had significantly fewer episodes of *Candida* after the investigators controlled for gestational age, model of delivery, and number of days of central vascular access. However, exposure to a high-humidity environment was significantly associated with an increased risk of *Candida* sepsis in the intervention group (odds ratio 10.5). Overall infection rates remained 0%-3% during the period 1999-2004.

**—From staff reports**