## CLINICAL C

#### **Amoxicillin and Acute Otitis Media**

A standard daily dose of 40-45 mg/kg per day amoxicillin is an appropriate first-line antibiotic for children with acute otitis media who have received at least three doses of the heptavalent pneumococcal conjugate vaccine, if treatment is needed, reported Dr. Jane Garbutt and her colleagues at Washington University, St. Louis.

If therapy is necessary, high-dose amoxicillin may be appropriate for unvaccinated children or for those who have received fewer than three doses of the vaccine (Pediatrics 2006;117:1087-94).

An increase in vaccination with at least three doses of heptavalent pneumococcal conjugate vaccine (PCV7) from 0% to 54% in a St. Louis community from 2001 to 2004 appeared to reduce the prevalence of *Streptococcus pneumoniae* isolates that were not susceptible to penicillin (NSSP), whereas the prevalence of *S. pneumoniae* not susceptible to amoxicillin (NSSP-A) remained low.

The investigators reviewed data from 327 children younger than 7 years old with new diagnoses of acute otitis media, otitis media with effusion, acute sinusitis, streptococcal pharyngitis, nonspecific upper respiratory tract infections, or a cough illness during the 4-year period.

The prevalence of NSSP was significantly reduced in children with any diagnosis who had received at least three doses of PCV7, compared with those who had fewer or no doses (8% vs. 20%), and no NSSP-A isolates were found among the study children who had received at least three doses of the PCV7 vaccine.

In addition, vaccination with at least three doses of PCV7 was protective for all child care attendees, but vaccination with at least one dose was not protective.

### Antibiotics End K. kingae Outbreak

An outbreak of three *Kingella kingae* infections at a day care center was contained using prophylactic antibiotics, reported Dr. Pablo Yagupsky of Ben-Gurion University of the Negev in Beer-Sheva, Israel, and his colleagues.

The findings confirm the susceptibility of day care populations to invasive disease. *K. kingae* has a particularly high carriage rate among very young children, who frequently put their hands or other objects into their mouths and spread the organisms through saliva, the investigators noted (Pediatr. Infect. Dis. J. 2006;25:526-32).

The outbreak occurred during a period of 15 days (starting on March 10, 2005), when three children aged 8-12 months who attended the same day care center showed signs of bone infection, and osteomyelitis was confirmed. All three children were hospitalized and treated, and all three recovered uneventfully. *K. kingae* was confirmed in one patient and suspected in the other two.

Surveillance cultures taken from several day care centers before the administration of prophylactic antibiotics yielded *K. kingae* isolates in 4 of 11 attendees at the index facility and 5 of 12 and 1 of 15 attendees at neighboring facilities. The confirmed *K. kingae* isolate was the same strain as other isolates from the same day care center, but different from strains

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found at neighboring facilities.

All children aged 6-30 months who lived in the community started an antibiotic regimen of 20 mg/kg oral rifampin twice daily for 2 days, followed by 80 mg/kg amoxicillin twice daily for 4 days. The carrier rate was significantly reduced from 11 children (28%) to 2 children (5%) among the 40 children who completed the course of antibiotic therapy.

#### **Dexamethasone Eases Pharyngitis**

Children with streptococcal pharyngitis who were treated with dexamethasone as

an add-on therapy showed significant improvement in general condition and activity levels after about 1 day, compared with 2 days for those who were treated with a placebo in a pilot study.

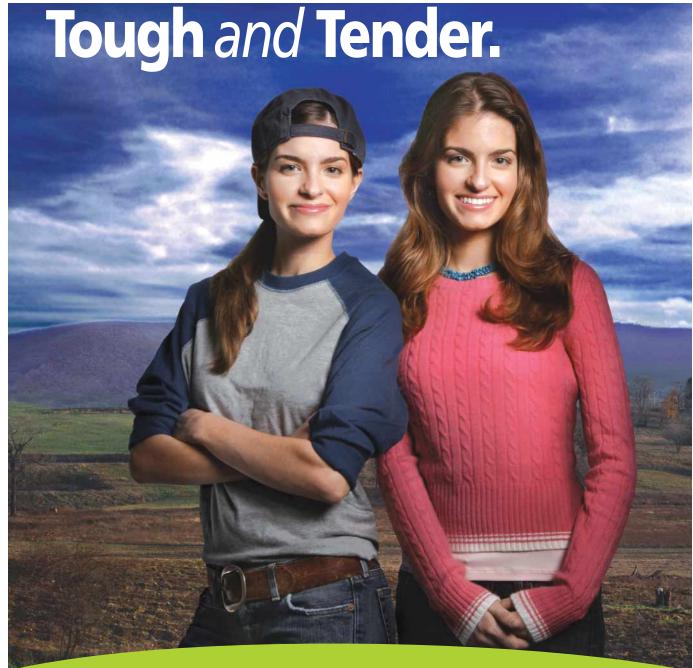
In addition, children who received three daily doses of dexamethasone showed significant improvement in their sore throat symptoms, whereas those who received one daily dose did not show such improvement, reported Dr. Mary-Lynn Niland and her colleagues at Ohio State University, Columbus.

Steroids have been shown to mitigate throat pain in adults with pharyngitis, and the researchers sought to assess the effects of extended dosage on symptoms in children (Pediatr. Infect. Dis. J. 2006; 25:477-81)

A total of 90 children aged 4-21 years with group A beta hemolytic streptococcal pharyngitis were randomized to receive one oral daily dose of 0.6 mg/kg dexamethasone (maximum dose 10 mg), three oral daily doses of 0.6 mg/kg dexamethasone (maximum dose 10 mg), or a placebo in addition to an oral or intramuscular antibiotic.

The children were assessed by a combination of telephone interviews and symptom diaries.

-Heidi Splete



## In treating acne:

# The efficacy you expect and the tolerability your patients deserve.

- Published dermatology guidelines recommend a topical retinoid for most acne patients
- Proven to reduce both non-inflammatory and inflammatory lesions<sup>2,3</sup>
- Superior tolerability alone or as part of a regimen<sup>4,5</sup>

Although mostly mild, dryness, erythema, burning, or pruritus were experienced by 10% to 52% of patients depending upon formulation. Concomitant use of potentially irritating products or overexposure to sunlight, sunlamps, or extreme wind or cold may increase potential for irritation. Use of sunscreen and protective clothing over treated areas is recommended when exposure cannot be avoided.

Please see next page for brief summary of Prescribing Information.

