

pneumonia. These agents are effective against pneumococci, the most common cause of pneumonia, but not against the rarer microbes. The present study suggests that physicians need to be more aware of the prevalence of atypical infections in order to administer prompt effective treatment for these infections, which in the case of *Legionella* may be life threatening.

The continuation of this study is expected to help associate specific types of pneumonia with particular patient populations, enabling physicians to be more accurate in their empiric therapy.

'The goal is to establish age-specific rates for a variety of pneumonias and to identify clinical features associated with specific causes. This information should help guide physicians in choosing effective antibiotics,' said Plouffe.

### Oropharyngeal Decontamination Decreases Incidence of Ventilator-Associated Pneumonia

The results of a double-blind, placebo-controlled trial, published in the May 22, 1991, issue of *JAMA*, indicate that a topical oropharyngeal antibiotic applied to patients requiring mechanical ventilation lowered the rate of ventilator-associated pneumonia by a factor of five, and decreased the requirements for intravenous antibiotics.

In the study, conducted by researchers at the University Hospital of Geneva, Geneva, Switzerland, 52 patients requiring mechanical ventilation during a three- to 34-day period (mean, ten days) received either polymyxin B sulfate, neomycin sulfate, and vancomycin hydrochloride (PNV) or placebo six times daily in the oropharynx. During the first 12 days of intubation, tracheobronchial colonization by gram-negative bacteria and *Staphylococcus aureus*, as well as pneumonia, occurred less frequently in the PNV

group than in the placebo group (16% versus 78%,  $p < .0001$ ).

Hospital mortality was not different, but systemic antibiotics were prescribed less often in the PNV group, and no resistant microorganisms emerged.

### Quinolones Active Against Causative Pathogens of Travelers' Diarrhea

Temafloxacin, a new fluoroquinolone, and norfloxacin were found to be consistently active in vitro against bacterial strains that commonly cause travelers' diarrhea and persistent infantile diarrhea, according to a report from the 31st Interscience Conference on Antimicrobial Agents and Chemotherapy (ICAAC).

The study also confirmed that strains of enteroadherent *Escherichia coli* show a high rate of resistance to antimicrobials, which may explain some of the antibiotic treatment failures for travelers' diarrhea. One hundred enteroadherent *E coli* isolates from American students who acquired diarrhea in Guadalajara, Mexico, in the past five years were evaluated. The study determined the minimum inhibitory concentration (MIC) of these strains and compared their patterns of susceptibility with those of other enteropathogens from the same population.

From the same population and over the same period of time, 100 isolates of enterotoxigenic *E coli*, 51 *Shigella*, 50 *Salmonella*, and 47 *Campylobacter* were evaluated along with enteroadherent *E coli* for their susceptibility to ampicillin, doxycycline, trimethoprim, norfloxacin, and the new temafloxacin. MICs of norfloxacin and temafloxacin were less than 0.5 for enteroadherent *E coli*, enterotoxigenic *E coli*, *Shigella*, and *Salmonella*. The MIC of temafloxacin for *Campylobacter* also was less than 0.5.