19A Linked to Necrotizing Pneumonia

BY HEIDI SPLETE
Senior Writer

WASHINGTON — Serotype 19A of *Streptococcus pneumoniae* is the culprit behind some complicated cases of necrotizing pneumonia in young children, based on findings from four cases that occurred between September 7, 2007, and March 30, 2008, at a single hospital.

"Severe necrotizing pneumonia caused by this serotype had not previously been reported in children," explained Dr. Susan Wootton of the University of Texas, Houston, who presented the cases with her associates in a poster at the jointly held annual meeting of the Interscience Conference on Antimicrobial Agents and Chemotherapy and the annual meeting of the Infectious Diseases Society of America.

The 19A strain is one of several that are not included in the current pneumococcal conjugate vaccine, PCV7. Data from the Centers for Disease Control and Prevention that also were presented at the meeting showed an increase in invasive pneumococcal disease from nonvaccine serotypes in all age groups.

Serotype 19A has not previously been reported as a cause of complicated pneumonia in children, but these cases suggest it should be considered.

The four children ranged in age from 3 to 4 years (mean age, 3.4 years). Of these, three were previously healthy and one had asthma. All four had been vaccinated with PCV7. *S. pneumoniae* was isolated from pleural fluid in three cases and from blood in three cases.

Chest radiographs revealed multilobar infiltrates in four children, empyema in three children, and pneumatoceles in two children. Overall, three children were admitted to the intensive care unit and intubated 5-22 days, with an average of 11 days. In addition, three children had abscesses that required surgical drainage. The hospital stays ranged from 11 to 28 days (average stay, 19 days).

Serotype 19A has not previously been reported as a cause of complicated pneumonia in children, but these cases suggest that it should now be considered in the differential diagnosis, Dr. Wootton and her associates noted.

This study was limited by its small size and narrow geographical scope, and more research is needed to assess the large-scale impact of serotype 19A on necrotizing pneumonia. But the results support the need for an expanded pneumococcal vaccine for children in the United States, they said.

Dr. Wootton stated that she had no financial conflicts to disclose. ■

Coronavirus Adds Respiratory Symptoms

BY HEIDI SPLETE
Senior Writer

WASHINGTON — Two types of newly recognized coronavirus were identified in stool samples of patients with gastrointestinal disease, and more than half of those patients also had respiratory symptoms, based on data from more than 400 adults and children.

A total of nine stool samples that tested negative for *Clostridium difficile* instead tested positive for one of two strains of human coronavirus, HCoV-NL63 and HCoV-HKU1, said Dr. Frank Esper, a pediatrician and infectious disease specialist at the Rainbow Babies and Children's Hospital in Cleveland.

Dr. Esper presented the findings at the jointly held annual Interscience Conference on Antimicrobial Agents and Chemotherapy and the annual meeting of the Infectious Diseases Society of America.

These two coronaviruses have been associated with upper and lower respiratory tract disease in previous studies, he said.

During the severe acute respiratory syndrome (SARS) outbreak in 2002-2003, enteric involvement was reported in more than 70% of patients during their illnesses, and coronavirus RNA was found in stool samples from SARS patients, Dr. Esper noted.

In the current study, Dr. Esper and his colleagues examined the association of coronaviruses with gastrointestinal illness in children and adults.

The researchers collected stool sam-