# Program Fails to Cut Hospital-Acquired Infections

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NICE, FRANCE — A campaign to improve hand hygiene at a Danish hospital failed to decrease hospital-acquired infections, Dr. Sussie Laustsen and colleagues reported in a poster at the 16th European Congress of Clinical Microbiology and Infectious Diseases.

The finding comes at a time when hand hygiene is being promoted as the cornerstone of the World Health Organization's Global Patient Safety Challenge, which launched in October 2005 to reduce health care–acquired infections worldwide.

In April 2004, a campaign began in all clinical departments at Aarhus (Denmark) University Hospital that included an evidence-based guideline and e-learning program describing how and when to perform alcohol-based hand disinfection.

Trained observers recorded potential opportunities for hand disinfection during four surveys during 2004-2005. Interobserver variation was minimized through audits.

Compliance with hand disinfection increased from 53% in the first quarter of 2004 to 71% in the first quarter of 2005, and consumption of hand alcohol doubled from about 1,250 liters at baseline to 2,500 liters in 2005.

But the incidence of hospital-acquired infections did not decrease from baseline (1.77 per 1,000 bed-days) to the first quarter of 2005 (1.80 per 1,000 bed-days).

The reason for this finding is unknown, but the hospital plans to increase surveillance, particularly among physicians, and is conducting a prevalence study of other nosocomial infections, Dr. Laustsen said in an interview.

As shown in other studies, compliance in 2005 for physicians was lower (20%) than for nurses (44%) and other health care workers (25%). ■



# *Early Vancomycin Linked to Hearing Loss in Children*

A significant increase in hearing loss occurred among children with pneumococcal meningitis who received vancomycin less than 2 hours after a first dose of cefotaxime or ceftriaxone, reported Dr. Steven C. Buckingham of the University of Tennessee Health Science Center in Memphis and his associates.

The retrospective study included 114 children with an average age of 10 months. Of these, 109 received vancomycin and either cefotaxime or ceftriaxone given previously or concomitantly (Pediatrics 2006;117:1688-94).

**The median vancomycin start time was less than 1 hour after receiving a cephalosporin in children with a hearing loss, vs. 4 hours in those without a loss.**

Audiometric tests were conducted on 67 of the children who were discharged from the hospital, and 37 (55%) demonstrated moderate to profound sensorineural hearing loss in at least one ear.

Data on vancomycin start times were available for 98 children. The vancomycin start time after receiving a cephalosporin was less than 1 hour in 38 children, 1-2 hours in 16 children, 2-5 hours in 16 children, and more than 5 hours in 28 children.

Overall, the median vancomycin start time was less than 1 hour after receiving a cephalosporin among the children with hearing loss, compared with a median start time of 4 hours among children without hearing loss. The proportion of children with hearing loss decreased as the vancomycin start time from the administration of a cephalosporin increased: 18 of 23 (78%) at less than 1 hour, 6 of 9 (67%) at 1-2 hours, 3 of 9 (33%) at 2-5 hours, and 5 of 18 (28%) at greater than 5 hours.

Although combination therapy has been recommended for children with pneumococcal meningitis, the data showed no clinical benefit from early vancomycin dosing. Physicians might consider delaying the first dose of vancomycin until at least 2 hours after the first dose of cephalosporins, the investigators wrote.

**—Heidi Splete**