

susceptible HD patients. Pediatric healthcare providers often are confused concerning the appropriate dose of hepatitis B vaccine in children of various ages. The confusion stems from the existence of multiple dosage formulations of the two commercially available hepatitis B products, with each manufacturer recommending different doses of HBsAg at different ages.

Among adult HD patients, seroconversion rates and anti-HBsAg titers were lower than those in healthy controls.<sup>7</sup> It currently is recommended that all susceptible adult HD patients be administered 40 µg of HBsAg; special formulations of the above dosage are available from both manufacturers for adult HD patients. There are no specific dose recommendations for pediatric HD patients. Eight centers administered the recommended adult dose, and seven used a dose higher than that recommended for children. Most PHDCs had infection control policies in place to curtail the spread of HBV infection among HD patients, and hepatitis B vaccination coverage among pediatric HD patients was markedly higher than in adult HD patients.

Our survey, however, indicated that most centers were not in full compliance with all of the CDC recommendations for isolating HBsAg-positive patients; although most would use a separate HD room, few would use dedicated personnel.

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## Evaluation of Silver-Coated Urinary Catheters in Hospitalized Patients

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Urinary tract infections (UTIs) account for 30% to 40% of nosocomial infections resulting in morbidity, mortality, and increased length of hospital stay. Karchmer and coinvestigators from the University of Virginia Health System, Charlottesville, Virginia, conducted a study to assess the efficacy of a silver-alloy, hydrogel-coated latex urinary catheter for the prevention of nosocomial catheter-associated (CA) UTIs. A 12-month randomized crossover trial compared rates of nosocomial CA UTI in patients with silver-coated and uncoated catheters. A cost analysis was conducted.

There were 343 infections among 27,878 patients (1.23 infections/100 patients) during 114,368 patient-days (3.00 infections/1,000 patient-days). The relative risk of infection per 1,000 patient-days was 0.79 for study wards randomized to silver-coated catheters compared with those randomized to uncoated catheters. Infections occurred in 291 of 11,032 catheters used on study units (2.64 infections/100 catheters). The relative risk of infection per 100 silver-coated catheters used on study wards compared with uncoated catheters was 0.68. Fourteen CA UTIs (4.1%) were complicated by secondary bloodstream infection. One death appeared related to the secondary infection. Estimated hospital

cost savings with the use of the silver-coated catheters ranged from \$14,456 to \$573,293.

The authors concluded that the risk of infection declined by 21% among study wards randomized to silver-coated catheters and by 32% among patients in whom silver-coated catheters were used on the wards. Use of the more expensive silver-coated catheter appeared to offer cost savings by preventing excess hospital costs from nosocomial UTI associated with catheter use.

FROM: Karchmer TB, Giannetta ET, Muto CA, Strain BA, Farr BM. A randomized crossover study of silver-coated urinary catheters in hospitalized patients. *Arch Intern Med* 2000;160:3294-3298.