Medical News

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Additional news items in this issue: *European Glycopeptide Susceptibility Survey of Gram-Positive Bacteria,* page 890; *Antimicrobial Threat Discussed,* page 914; *Glycopeptide-Resistant* Enterococcus faecium, page 928.

CDC to Take Over FDA's Evaluation of Bacterial Identification Methods

For years, the Diagnostic Microbiology Section of the CDC's Hospital Environment Laboratory Branch has tested and published extensively on the accuracy and utility of commercially available instruments and methods used to identify bacterial agents of infectious disease. Until this year, the FDA evaluated these instruments prior to their introduction to the marketplace and subsequently cleared them for use through the 510 application process. However, Congress recently passed legislation preventing the FDA from "clearing" instruments and methods for the phenotypic identification of organisms before they could be marketed. As a result, the role of the Diagnostic Microbiology Section in evaluating commercially available instruments and methods will expand substantially and will work closely with the FDA in providing the laboratory community with critical information about available bacterial identification methods.

Nosocomial Infections in CCUs

Richards and colleagues from the CDC's Hospital Infection Program have described the epidemiology of nosocomial infections in coronary-care units (CCUs) in the United States. They analyzed data collected between 1992 and 1997, using the standard protocols of the NNIS intensive-care unit (ICU) surveillance component. Data on 227,451 patients with 6,698 nosocomial infections were analyzed.

Urinary tract infections (35%), pneumonia (24%), and primary bloodstream infections (17%) almost always were associated with use of an invasive device (93% with a urinary catheter, 82% with a ventilator, and 82% with a central line, respectively). The distribution of pathogens differed from that reported from other types of ICUs. *Staphylococcus aureus* (21%) was the most common species reported from pneumonia and *Escherichia coli* (27%) from urine. Only 10% of reported urine isolates were *Candida albicans. S aureus* (24%) was a more common bloodstream isolate than enterococci (10%). The mean overall patient infection rate was 2.7 infections per 100 patients. Device-associated infection rates for bloodstream infections, pneumonia, and urinary tract infections did not correlate with length of stay, number of hospital beds, number of CCU beds, or the hospital teaching affiliation, and were the best rates for comparisons between units. Use of invasive devices was lower than in other types of ICUs. Overall patient infection rates were lower than in other types of ICUs, which is explained largely by lower rates of invasive device use.

From: Richards MJ, Edwards JR, Culver DH, Gaynes RP. Nosocomial infections in coronary care units in the United States. National Nosocomial Infections Surveillance System. *Am J Cardiol* 1998;82:789-793.

Selective Screening for Control of MRSA

Screening for methicillin-resistant *Staphylococcus aureus* (MRSA) carriage in patients at risk was evaluated as part of a control program in a 26-bed medical intensive-care unit (ICU) of a university hospital with a high level of endemic MRSA by investigators from the Unite d'Hygiene et Prevention de l'Infection, Hopital Henri Mondor, Creteil, France. Control measures included isolation and barrier precautions, skin decolonization with chlorhexidine of patients from whom MRSA was recovered, and mupirocin treatment of nasal carriers of MRSA. Of 3,686 patients admitted during a 4-year period, 44% were screened, which occurred during admission for 38%; MRSA was recovered from 293 patients (8%). There were 150 imported cases and 143 ICU-acquired cases, of which 51% and 45%, respectively, first were identified through screening.

Nasal swab cultures identified 84% of MRSA carriers. The incidence of all ICU-acquired cases and of acquired colonization or infection decreased from 5.8% and 5.6% to 2.6% and 1.4% (P=.002 and P<.001), respectively, whereas that of imported cases remained unchanged (range, 3.8%-4.3%; P=.8). Selective screening for nasal carriage during admission to high-risk areas may contribute to identification of a substantial proportion of cases of MRSA and to early implementation of effective control measures.

From: Girou E, Pujade G, Legrand P, Cizeau F, Brun-Buisson C. Selective screening of carriers for control of methicillin-resistant *Staphylococcus aureus* (MRSA) in high-risk hospital areas with a high level of endemic MRSA. *Clin Infect Dis* 1998;27:543-550.

Biofilms: New Research at CDC

Many pathogenic microorganisms can produce protective coatings, called biofilms, that encase the organisms and help them adhere to internal surfaces of catheters, water pipes, medical devices, and even some body tissues. These protective coatings (similar to tooth plaque) may enable the