

highly virulent. RAPD typing was found to be a simple, rapid, and effective method for the epidemiological investigation of this outbreak, and performance of typing by this method was simpler and less time-consuming than that of typing by PFGE. RAPD typing may have more general application for the study of *S aureus* infections in hospitals.

FROM: Tambic A, Power EG, Talsania H, Anthony RM, French GL. Analysis of an outbreak of non-phage-typeable methicillin-resistant *Staphylococcus aureus* by using a randomly amplified polymorphic DNA assay. *J Clin Microbiol* 1997;35:3092-3097.

Reuse of Angioplasty Catheters

Investigators from a Florida clinic have evaluated the reuse of percutaneous transluminal coronary angioplasty (PTCA) balloon catheters, restored under a strict manufacturing process, in patients with coronary artery disease. Most countries outside the United States routinely reuse disposable medical equipment, resulting in substantial cost savings. Because of quality and legal concerns, reuse in the United States has been limited.

The catheters were restored by a process strictly controlled for bioburden and sterility. Used PTCA balloon catheters were shipped to a central facility and were decontaminated, cleaned, and tested for endotoxin using the limulus amebocyte lysate gel-clot method. Physical testing and quality assurance were performed. The products were packaged and sterilized with ethylene oxide. Catheter performance was assessed in a pilot study powered ($\beta=0.8$) to detect a 5% difference in the angiographic failure rates of new and reused balloons.

Of the 107 patients enrolled, 106 had a successful laboratory outcome, and 1 required coronary artery bypass graft surgery after failed rescue stenting. Stenting was performed in 37 patients (29 planned, 8 rescue). The angiographic failure rate was 7% (95% confidence interval, 2%-12%), comparable to the 10% rate seen with new balloons in other studies.

The investigators concluded that the restoration of disposable coronary angioplasty catheters using a highly controlled process appears to be safe and effective, with success rates similar to those of new products and no detectable sacrifice in performance. Cost analysis suggests that implementation of reuse technology for expensive disposable equipment may offer cost savings for US hospitals.

FROM: Browne KF, Maldonado R, Telatnik M, Vlietstra RE, Brenner AS. Initial experience with reuse of coronary angioplasty catheters in the United States. *J Am Coll Cardiol* 1997;30:1735-1740.

Outbreak of Adenovirus in Psychiatric Facility

Outbreaks of acute respiratory disease caused by adenovirus rarely are documented in civilian populations, and adenovirus 35 is an uncommon serotype best recognized as a cause of serious disease in immunocompromised patients. The CDC recently investigated an outbreak of adenovirus 35 pneumonia among residents and staff of a

chronic-care psychiatric facility. Fourteen (26%) of 53 residents and 4 (2%) of approximately 200 staff had radiographically confirmed pneumonia. Thirteen (93%) of 14 residents with pneumonia were hospitalized; 5 (36%) required mechanical ventilation, and 1 (7%) died. One staff member was hospitalized. Adenovirus infection was diagnosed in 17 of 18 persons with pneumonia by culture or serology and was confirmed as adenovirus 35 infection in 8 persons. Residents with pneumonia had resided at the facility longer than other residents. Chronic illness was not a risk factor for severe disease.

The researchers concluded that crowding and poor hygienic behaviors probably facilitated transmission among residents.

FROM: Sanchez MP, Erdman DD, Torok TJ, Freeman CJ, Matyas BT. Outbreak of adenovirus 35 pneumonia among adult residents and staff of a chronic care psychiatric facility. *J Infect Dis* 1997;176:760-763.

Nosocomial *Fusarium* Infections

Despite increasing reports of life-threatening *Fusarium* infections, little is known about its pathogenesis and management. Researchers from the University of Texas MD Anderson Cancer Center, Houston, conducted a retrospective study of invasive fusarial infections over a 10-year period (1986-1995) in patients with hematologic malignancy. Forty patients with disseminated infection and three patients with invasive lung infection were included in the analysis; all were immunocompromised and were diagnosed antemortem.

Thirteen patients responded to therapy, but two relapsed. Response was associated with granulocyte transfusions, amphotericin B lipid formulations (four patients each), and an investigational triazole (two patients). Resolution of infection was seen only in patients who ultimately recovered from myelosuppression. Portal of entry was the skin (33%), the sinopulmonary tree (30%), and unknown (37%). *Fusarium* causes serious morbidity and mortality, and may mimic aspergillosis.

The authors note that these infections seem to respond to newer therapeutic approaches, but only in patients with ultimate recovery from myelosuppression, and may relapse if neutropenia recurs.

FROM: Boutati EI, Anaissie EJ. *Fusarium*, a significant emerging pathogen in patients with hematologic malignancy: ten years' experience at a cancer center and implications for management. *Blood* 1997;90:999-1008.

CJD Update

In 1997, a nongovernmental surveillance group for Creutzfeldt-Jakob disease (CJD) in Japan reported to the Ministry of Health and Welfare its analysis of a 1996 mail questionnaire survey of neurological, psychiatric, and neuropathologic institutions throughout Japan. This analysis identified 829 patients with CJD diagnosed by physicians during January 1979 to May 1996, including a large number (43 patients) who had received a cadaveric dura mater graft during a neurosurgical (42 patients) or orthopedic (1