

Medical News

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New Test for Rapid Diagnosis of IV Catheter-Related Sepsis

A method has been identified that may be useful for rapid detection of infection of central venous catheters while they are in place. Dr. J.A. Rushforth et al evaluated 51 patients with suspected central venous catheter sepsis. Seventy-three catheters were studied: 19 Broviac and 54 silastic percutaneous catheters (0.6 mm). Paired peripheral and central venous blood samples were inoculated directly onto solid media. Catheter-related sepsis was deemed to be present if blood from both sources was culture-positive with the same organism and the number of colony forming units was at least five times greater in the central than in the peripheral specimen.

In addition, 50 μ L of central venous blood was lysed and centrifuged, and slides were prepared and stained with acridine orange and examined by ultraviolet microscopy. The presence of any bacteria was considered a positive test, and a duplicate slide was gram stained.

Catheter-related sepsis was confirmed in 31 cases among 95 suspected episodes in the 51 patients. Twenty cases were due to coagulase-negative staphylococci, while the rest were due to *Enterococcus faecalis* and *Klebsiella* species.

The acridine orange leukocyte cytospin test was negative in 60 of 64 instances in which catheter-related sepsis was absent and positive in 27 of 31 in whom it was present. The sensitivity was 87%, specificity 94%, positive predictive value 94%, and negative predictive value 92%.

FROM: Rushforth JA et al. Rapid diagnosis of central venous catheter sepsis. *Lancet* 1993;342:402-403.

OSHA Fines Employers \$1.3 Million Under Bloodborne Standard

Between March 1, 1992, and February 28, 1993, the federal Occupational Safety and Health Administration (OSHA) conducted more than 1,000 inspections of worksites where employees are at risk for occupational exposure to bloodborne pathogens, including hospitals, physician and dental offices, home health agencies, nursing home facilities, laboratories, and funeral homes. More than 1,700 violations were cited, with \$1.3 million in total penalties.

More than half of the inspections were prompted

by complaints from employees. The most common violations were 1) not communicating hazards to employees (200 violations); 2) failure to vaccinate occupationally exposed workers and provide appropriate medical evaluations and follow-up (184 violations); 3) housekeeping infractions, including improper containment of regulated waste, inaccessible sharps containers, and contaminated worksites (158 violations); 4) lack of provision, inaccessibility, and improper use of appropriate personal protective equipment (140 violations); and 5) failure to use engineering controls and safe work practices, including unnecessary recapping of needles and failure to use mechanical devices for recapping or needle removal (78 violations).

Bloodborne Pathogen Standard violations represent approximately 20% of the total citations issued by OSHA. Twenty-seven percent were for violations related to the hazardous materials standard, and 28% were for lack of compliance with the ethylene oxide and formaldehyde standards.

David Satcher Appointed Director of CDC

President Clinton announced the appointment of Dr. David Satcher as Director of the Centers for Disease Control and Prevention (CDC), replacing Dr. William Roper. Satcher, a family physician, has been president of Meharry Medical College in Nashville, Tennessee, since 1982. The appointment, effective January 1, 1994, will make Dr. Satcher the first African-American director of the government's main public health agency.

Dr. Satcher is best known as the architect of a controversial plan that merged Meharry's Hubbard Hospital with Nashville's Metropolitan General Hospital. The 1992 merger allows Meharry to take over indigent care for the city at Hubbard Hospital, thus strengthening the school's patient base. Dr. Satcher said, "I would like to think that in five years the CDC will be looked at as exemplary in terms of its management. I want people to view CDC as a major force in the country in terms of prevention, making a difference in what is happening to our children, and making an impact on AIDS [acquired immunodeficiency syndrome]. Public health is being challenged as never before, and I want to be part of the struggle."

With an annual budget of \$2.2 billion and more than 7,000 employees, the Atlanta-based CDC is one of eight public health service agencies within the U.S.