

Medical News

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Intravascular Catheter-Related Infections

Central venous catheters have become essential devices for the management of critically and chronically ill patients; however, their use is often complicated by catheter-related bloodstream infections (CRBSIs), many of which could be prevented. A review article has recently been published on this topic. The article is based on a review of more than 100 published articles on intravascular catheter-related infections. The article focuses on the most recent advances in the methods of diagnosis of CRBSI as they relate to its pathogenesis and on novel preventive techniques and approaches to management.

CRBSIs may be diagnosed by different methods, including simultaneous quantitative blood cultures, with the central blood culture yielding at least fivefold colony-forming units greater than the peripheral blood culture, and simultaneous blood cultures, whereby the catheter-drawn blood culture becomes positive at least 2 hours before the peripheral blood culture. Novel preventive techniques include the use of ionic silver, an anticoagulant-antimicrobial flush solution, a new aseptic hub, and antimicrobial impregnation of catheters and dressings. The management of a CRBSI should be based on whether the infection is complicated or uncomplicated.

Novel technologies that have been proved to aid in the diagnosis and prevention of CRBSIs should be considered in clinical practice. The management approach should be based on the type of microorganism causing the infection and on whether the infection is complicated or uncomplicated.

FROM: Raad II, Hanna HA. Intravascular catheter-related infections: new horizons and recent advances. *Arch Intern Med* 2002;162:871-878.

Anthrax as a Biological Weapon: Updated Recommendations for Management

The Working Group on Civilian Biodefense of the Johns Hopkins Center for Civilian Biodefense Strategies met recently to review and update consensus-based recommendations for medical and public health professionals following a *Bacillus anthracis* attack against a civilian population. The Working Group included 23 experts from academic medical centers, research organizations, and governmental, military, public health, and emergency management institutions and agencies. The group also met to develop consensus-based recommendations for measures

to be taken by medical and public health professionals if hemorrhagic fever viruses (HFVs) were used as biological weapons against a civilian population (see related story below).

MEDLINE databases were searched from January 1966 to January 2002, using the Medical Subject Headings anthrax, *Bacillus anthracis*, biological weapon, biological terrorism, biological warfare, and biowarfare. Reference review identified work published before 1966. Participants identified unpublished sources.

Through a consensus process, the final recommendations include diagnosis of anthrax infection, indications for vaccination, therapy, postexposure prophylaxis, decontamination of the environment, and suggested research. This revised consensus statement presents new information based on the analysis of the anthrax attacks of 2001, including developments in the investigation of the anthrax attacks of 2001; important symptoms, signs, and laboratory studies; new diagnostic clues that may aid future recognition of this disease; current anthrax vaccine information; updated antibiotic therapeutic considerations; and judgments about environmental surveillance and decontamination.

FROM: Inglesby TV, O'Toole T, Henderson DA, et al. Anthrax as a biological weapon, 2002: updated recommendations for management. *JAMA* 2002;287:2236-2252.

Public Health Management of Hemorrhagic Fever Viruses Used as Biological Weapons

The Working Group on Civilian Biodefense of the Johns Hopkins Center for Civilian Biodefense Strategies met recently to develop consensus-based recommendations for measures to be taken by medical and public health professionals if hemorrhagic fever viruses (HFVs) were used as biological weapons against a civilian population. The Working Group included 26 representatives from academic medical centers, public health, military services, governmental agencies, and other emergency management institutions.

MEDLINE was searched from January 1966 to January 2002. Retrieved references, relevant material published prior to 1966, and additional sources identified by participants were reviewed. Through a consensus process, final recommendations were developed. The Working Group agreed that weapons disseminating a number of HFVs could cause an outbreak of an undifferentiated febrile illness 2 to 21 days later, associated with clinical manifestations that could include rash, hemorrhagic