

Medical News

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Federal Register Notice: Reprocessing Single-Use Devices

The FDA seeks public comment on the proposed voluntary survey of hospitals to collect information on the extent and nature of current practice of reprocessing single-use medical devices by these institutions. Comments should be submitted by June 29, 2001. To view this notice, go to <http://www.fda.gov/OHRMS/DOCKETS/98fr/043001g.htm>.

Risk of Infection Associated With Artificial Fingernails

Two studies have recommended that restrictions on wearing of artificial fingernails by healthcare workers (HCWs) should be extended beyond the operating room (OR) to other high-risk areas. In one report, three unusual surgical-site infections were traced to an OR staff member wearing artificial nails. The other study suggested that artificial nails are more likely than natural nails to harbor pathogens and that an alcohol-based gel works better than antimicrobial soap as a cleanser for both artificial and natural nails.

Parry and coinvestigators conducted a case-control study on deep wound infections caused by *Candida albicans* that occurred in three post-laminectomy patients at a Stamford (CT) Hospital in February 1997. Pulsed-field gel electrophoresis showed that the *Candida* isolates were identical. Further it was found that exposure to one OR technician, who had been wearing artificial nails on the dates of the three surgeries, was the only risk factor more common among the case-patients than among uninfected controls. The technician had no direct contact with the patients, and it was unclear how the pathogens reached the wounds; it may have resulted from the technician's preparation of the bone wax used in the operations.

In a separate but related study, McNeil and coinvestigators determined differences in the microbial flora found on the nails of HCWs wearing artificial nails compared to control HCWs with native nails and assessed the effect of hand cleansing with antimicrobial soap or alcohol-based gel in reducing levels of microorganisms. Cultures were obtained from 21 HCWs wearing artificial nails and 20 control HCWs before and after using antimicrobial soap or alcohol-based gel. Before cleansing with soap, 86% of HCWs with artificial nails had a pathogen (gram-negative bacilli, *Staphylococcus aureus*, or yeasts) isolated, compared to 35% of controls. A similar difference was noted before

hand cleansing with gel (68% vs. 28%). Significantly more HCWs with artificial nails than controls had pathogens remaining after hand cleansing with soap or gel. Of HCWs with artificial nails, only 11% cleared pathogens with soap compared with 38% with gel. Of control HCWs, only 14% cleared with soap compared with 80% with gel. The authors concluded that artificial acrylic fingernails could contribute to the transmission of pathogens, and their use by HCWs should be discouraged.

FROM: McNeil SA, Foster CL, Hedderwick SA, Kauffman CA. Effect of hand cleansing with antimicrobial soap or alcohol-based gel on microbial colonization of artificial fingernails worn by health care workers. *Clin Infect Dis* 2001;32(3):367-372. www.journals.uchicago.edu/CID/journal/issues/v32n3/000140/000140.html.

Parry MF, Grant B, Yukna M, Adler-Klein D, McLeod GX, Taddonio R, et al. *Candida* osteomyelitis and diskitis after spinal surgery: an outbreak that implicates artificial nail use. *Clin Infect Dis* 2001;32(3):352-357. www.journals.uchicago.edu/CID/journal/issues/v32n3/000094/000094.html.

Nosocomial Transmission of Rare Zoonotic Diseases

Drs. Weber and Rutala, from the University of North Carolina at Chapel Hill, recently published a review of zoonotic diseases, which discusses reasons for increased incidence and strategies to prevent transmission. They point out that increased travel, contact with exotic pets, occupational exposure, and leisure pursuits have increased the risk of exposure to zoonotic diseases.

Appropriate isolation precautions are required to prevent nosocomial transmission of rare zoonotic diseases, for which person-to-person transmission has been documented. Isolation and patient-management guidelines are included for the following infectious diseases with documented person-to-person transmission: Andes hantavirus disease, anthrax, B virus infection, hemorrhagic fevers (due to Ebola, Marburg, Lassa, Crimean-Congo hemorrhagic fever, Argentine hemorrhagic fever, and Bolivian hemorrhagic fever viruses), monkeypox, plague, Q fever, and rabies. Several of these infections may also be encountered as bioterrorism hazards (ie, anthrax, hemorrhagic fever viruses, plague, and Q fever). The authors point out that adherence to recommended isolation precautions will allow for proper patient care while protecting the healthcare workers who provide care to patients with known or suspected zoonotic infections capable of nosocomial transmission.