risk factors, such as incisions, indwelling IV and urinary catheters, and tracheostomy tubes.

Before a patient can come off this type of isolation, certain criteria must be met. The resistant organism must no longer be present at the site, whether or not the infection (eg, the drainage) has cleared. If a wound was infected but has now healed, the skin at the site must still be cultured. In addition, MRSA especially, may have colonized the skin or mucous membranes of the patient. Although one study found that in the presence of a tracheostomy, the site was more often positive than the nares.<sup>1</sup> We require a culture of both anterior nares to be negative for the resistant organism before the patient can be taken off isolation. The other requirement is that infection control personnel must be consulted before the patient comes off isolation, and we check that the culture results are final reports, not preliminary or interim findings, before permitting the discontinuance of isolation. Preliminary reports have occasionally been changed later and the extra day is well worth the wait.

Although the new category of Isolation for Antibiotic-Resistant Organisms is very demanding on the staff and costly for the institution, we have found that in a large institution such as ours (533 beds), it has prevented premature removal of patients from other types of isolation when their infection, but not necessarily their colonization, cleared. We believe keeping patients on this rather stringent kind of isolation has curtailed the spread, especially of MRSA, because personnel are anxious to avoid new cases, and are thus very strict in enforcing the necessary precautionary measures for themselves and other hospital personnel.

#### REFERENCES

- 1. Walsh TJ, Vlahov D, Hansen SL, et al: Prospective microbiologic surveillance in control of nosocomial methicillin-resistant *Staphylococcus aureus*. *Infect Control* 1987; 8:7-14.
- Garner J, Simmons BP: Guidelines for Isolation Precautions in Hospitals. Atlanta, Centers for Disease Control, 1983.
- Bitar CM, Mayhall CG, Lamb VA, et al: Outbreak due to methicillin- and rifampin-resistant *Staphylococcus aureus*: Epidemiology and eradication of the resistant strain from the hospital. *Infect Control* 1987; 8:15-23.
- Craig C: How should bacteremic MRSA patients and colonized employees be treated? *Hosp Infect Control* 1987; 14:94-95.

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## HIV Infection per Needlestick in Health Care Workers

#### To the Editor:

As an active participant in one<sup>1</sup> of several studies<sup>2-6</sup> designed to examine the actual risk of transmission of human immunodeficiency virus (HIV) through contaminated needlesticks in a nosocomial setting, I am concerned that the relative risk published to date<sup>1,6</sup> has been based on an assumption that all patients who are HIV-antibody positive are viremic and capable of transmitting HIV per needlestick to health care personnel.

As pointed out in a recent survey<sup>7</sup> of 39 HIV-antibody positive individuals who were in various clinical stages of infection, almost half (46.2%) of these patients lacked evidence of viremia, based on serum and peripheral mononuclear cell cultures. If we assume that almost half of the health care workers who have been enrolled to date in needlestick exposure studies were not exposed to blood containing. HIV, then our denominators used to calculate risk should be halved and the relative risk should be doubled.

At present, I worry that the published data foster a false sense of security, not only in health care workers but also in investigators participating in these epidemiologic studies. In this vein, such studies might be terminated before true relative risk can be obtained.

The future capability to perform more extensive virologic examinations of specimens routinely should allow us to categorize HIV-infected individuals more definitively into certain exposure risk groups, much like what has already been done in patients with hepatitis B.<sup>8</sup>

While the present HIV/needlestick studies provide us with relative risk based on HIV-antibody positivity, I think the ultimate goal of these studies should be to stratify this risk.

Certainly, these studies have already provided us with at least one valuable, and yet, not unexpected revelation that a large portion of the accidental exposures that have occurred could have been prevented had routine infection control policies been followed. We must take this strong message to our fellow health care professionals.

#### REFERENCES

- McCray E: The Cooperative Needlestick Surveillance Group: Occupational risk of the acquired immunodeficiency syndrome among health care workers. N Engl J Med 1986; 314:1127-1132.
- Hirsch MS, Wormser GP, Schooley RT, et al: Risk of nosocomial infection with human T cell lymphotropic virus III (HTLV-III). N Engl J Med 1985; 312:1-4.
- Weiss SH, Saxinger WC, Rechtman D, et al: HTLV-III infection among health care workers: Association with needlestick injuries. JAMA 1985; 254:2089-2093.
- 4. Kuhls TL, Viker S, Parris NB, et al: A prospective cohort study of the occupational risk of AIDS and AIDS-related infections in health care personnel. *Clin Res* 1986; 34:124A.

- 5. Gerberding JL, Bryant CE, Newman M, et al: Risk of acquired immune deficiency syndrome (AIDS) virus transmission to health care workers (HCW): Preliminary follow-up. *Clin Res* 1986; 34:101A.
- 6. Henderson DK, Saah AJ, Zak BJ, et al: Risk of nosocomial infection with human T cell lymphotropic virus type III/lymphadenopathy-associated virus in a large cohort of intensively exposed health care workers. Ann Intern Med 1986; 104:644-647.
- Michaelis BA, Levy JA: Recovery of human immunodeficiency virus from serum, letter. JAMA 1987; 257:1327.
- Shikata T, Karasawa T, Abe K, et al: Hepatitis B e antigen and infectivity of hepatitis B virus. J Infect Dis 1977; 136:571-576.

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## Infection Control Practitioners and AIDS

### To the Editor:

Infection control practitioners across the country are experiencing a crisis, particularly if they are located in large metropolitan hospitals. However, the eventual outcome of this crisis is potentially the same for all practitioners, regardless of hospital location. Now is the time for assessing our needs and acknowledging the support systems required to meet the challenge of the AIDS crisis in our hospitals in an effort to plan for the future.

Unfortunately, hospital administrators are suffering a similar crisis concomitantly. Fiscal restraints become increasingly pervasive each year, as we all know, and human immunodeficiency virus (HIV) infection does not generate revenue. Nonetheless, we are looking to our administrators for necessary support for additional educational funding and "person power" to meet the needs of effectively facing this epidemic in our everyday work experience.

Therefore, the struggle to balance an already, oftentimes, demanding profession with the impact of this epidemic is voiced as frustrating and burdensome by many of us. Our ability to communicate the required support systems is often inadequate.

Creative solutions are needed. The need to continue nosocomial surveillance programs, and meet the other needs we are all so familiar with in our hospitals is being greatly outweighed by this slow, insidious, progressive epidemic.

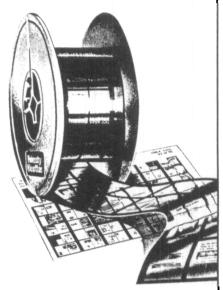
Please acknowledge that support is required by our own organization, as well as by the Centers for Disease Control. An improved system to realistically assess the need for infection control personnel based on bed occupancy, acuity, and size of the population with HIV infection being treated is needed. "One practitioner for every two hundred and fifty beds" is now archaic, therefore, no longer applicable. It is actually self-defeating.

The challenge is before us to respond, voice our professional needs, and responsibly represent ourselves to the hospital communities at large. Our lack of problem assessment will only continue to foster the chaos pervading this period of the AIDS crisis.

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