Medical News

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HICPAC Supports HCV Postexposure Follow-Up

Hepatitis C virus (HCV) poses a serious occupational risk to healthcare workers. The risk of seroconversion after percutaneous exposure to blood from anti-HCV–positive patients is approximately 3.5%. Virtually all people with acute HCV infection become chronically infected, and chronic liver disease develops in an average of 67% of those chronically infected. Postexposure prophylaxis with immune serum globulin is ineffective in preventing HCV.

A draft hepatitis report from the Centers for Disease Control and Prevention (CDC) concluded that "no recommendation can be made at this time for follow up of healthcare workers after occupational exposure to hepatitis C. The CDC's draft cites numerous issues that make a policy recommendation for postexposure follow-up problematic. These include limited data on the risk of transmission, limitations of available serologic testing for detecting infection and determining infectivity, lack of an effective postexposure prophylaxis, and the limited benefit of therapy.

CDC's Hospital Infection Control Practices Advisory Committee (HICPAC) reviewed the draft at a recent meeting and expressed concern over the lack of a specific recommendation regarding postexposure follow-up. HICPAC members felt that failure to make a formal recommendation would translate into inaction by many healthcare facilities. In addition, committee members pointed out that a stronger recommendation could be beneficial by learning more about the epidemiology of HCV.

In discussions at the HICPAC meeting, the CDC noted one of the major problems with postexposure follow-up is the limitation in testing methods. With the commercially available enzyme immunoassays that detect anti-HCV, there may be a prolonged interval between exposure and seroconversion. In many populations, including HCWs, the rate of anti-HCV false positivity is high. Approximately 10% of HCV infection will be undetected unless polymerase chain reation (PCR) is used to detect HCV RNA. However, PCR tests are not standardized and are primarily for research.

The greatest advantage from postexposure follow-up would be the opportunity for workers to seek evaluation and treatment for chronic liver disease. However, the current treatment, alpha interferon, is effective in fewer than 20% of those treated, and it is impossible to predict which patients will respond to treatment and sustain a long-term remission.

The Society for Healthcare Epidemiology of America (SHEA) also is working on a position paper regarding HCV and is leaning toward a recommendation for postexposure HCV testing of source patients following blood exposures to HCWs to provide additional information regarding occupational exposures.

The controversial issue of the HCV-positive HCW also was discussed in light of the first reported HCW-to-patient transmission of HCV. This outbreak occurred in Spain and involved five cardiac surgery patients with the same HCV genotype as the HCV-positive cardiac surgeon. It was agreed that the risk of HCW-to-patient transmission is not known, and a policy on the HCV-positive HCW would be difficult to develop because of the current limitations of testing and difficulties in determining infectiousness on an individual basis.

HICPAC's concerns are being considered by the CDC in a revision of the draft hepatitis document to be released in early 1996.

FROM: Centers for Disease Control and Prevention. Draft Hepatitis Surveillance Report, No. 56. Atlanta, GA: United States Public Health Service, Centers for Disease Control and Prevention.

Postexposure Zidovudine May Reduce HIV Risk

CDC recently reported the results of a retrospective case-control study to assess the risk factors for human immunodeficiency virus (HIV) infection after percutaneous exposure to HIV-infected blood. An increased risk of HIV infection was found to be associated with three factors. First, the risk increased if exposure involved a large quantity of blood, specifically, (1) a device visibly contaminated with the source patient's blood, (2) procedures involving a needle placed directly in a vein or artery, or (3) a deep injury. Second, the risk increased for exposures to blood from source patients with terminal illness, possibly reflecting the higher titer of HIV in blood late in the course of AIDS. Third, the data also suggested that the postexposure use of zidovudine (ZDV) may be protective for HCWs. After controlling for other risk factors associated with HIV transmission risk, the risk of HIV infection among HCWs who used ZDV was reduced by approximately 79%.

The CDC notes that there are a number of potential limitations of this study, such as the cases and controls being identified using different data sources, case reporting bias, and the small number (31) of cases.

Although failures of postexposure ZDV to prevent HIV infection in HCWs have been documented, this is the first study of HCWs exposed to HIV that assesses the effectiveness of ZDV as a postexposure prophylaxis. Studies involving animals have yielded inconclusive results. In studies involving humans, ZDV was reported to reduce the

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