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LETTER TO THE EDITOR

Isolation for Anti-HCV-Positive Hemodialysis Patients?

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In Europe, no criteria have been established on the issue of isolating anti-hepatitic C virus positive [anti-HCV (+)] hemodialysis (HD) patients, and the controversy continues about which methods are best to manage these subjects. As reported to the EDTA Registry 1993, 18% of European centers dialyze positive patients on dedicated machines in a separate room, while 37% use only dedicated monitors in common rooms. Therefore, 45% of the HD centers apply no isolation policy.

Although regular HD treatment can be considered a specific, independent risk factor for HCV infection, I agree with Jadoul (1) that, nowadays, a policy of isolation is not recommended for anti-HCV (+) individuals. The diagnostic value of current tests still remains to be determined. The presence of second- or third-generation anti-HCV assays offers no clue as to whether there is an ongoing or past infection and, on the other hand, the not yet routinely available polymerase chain reaction (PCR) technique, which can detect HCV RNA, is limited by false-positive or false-negative results.

Multiple combined risk factors do exist in renal units, either from HD machines and/or from any other dialysis equipment, and from the overall patient setting. HD patients may have a risk of acquiring hepatitis C cross-infection through the sharing of dialysis machines, but recently Jadoul and coworkers (2) were unable to demonstrate an association between seroconversion and the lack of regular sterilization of the monitors. Moreover, a spread of virus among untransfused HD patients not sharing dialysis equipment was reported (3), but the dialytic sessions were performed in the same room at the same time. Evidence against transmission of HCV through HD ultrafiltrate was reported (4) using dialysis monitors with closed circulation of dialysate (Monitral S, Hospal). This confirms that the critical issue is not the HCV contamination of the dialysate compartment, and that sharing the same dialysis machine may not represent an additional risk, provided antiseptic measures are carefully observed.

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A systematic monitor disinfection after each dialytic session (not applied by all the centers) could be sufficient to prevent cross-transmission via machines. The reported detection of HCV in dialysate and in blood ultrafiltrate of HCV (+) HD patients treated with high-flux membranes (5) must be confirmed. I do not agree with Simon and colleagues (6) about the prophylactic measure of removing dialysis machines with closed circulation of dialysate because this issue is not proved and contrasts with the results of Caramelo et al. (4).

Finally, at present a total of six HCV genotypes coexisting in various geographical locations have been isolated, and sometimes two different genotypes have been identified from the same patient (mixed infection). It is hypothesized that the patient can be infected concomitantly or successively by two different genotypes. Thus, placing all anti-HCV (+) patients together might enhance their chance of superinfection. It may be presumed, nevertheless, that the segregation of potentially infective patients may be efficacious, but it should be established whether this is necessary considering the organizational, economic, and social implications involved.

According to current knowledge, I believe that a strict adherence to universal precautions for preventing cross-transmission of blood-borne pathogens (Centers for Disease Control, Atlanta) is probably sufficient to prevent nosocomial spread of HCV infection in the HD setting. Probably, only a genotype screening of all PCR (+) HD patients could clarify the routes of transmission. The identification of distribution of various genotypes could be useful for understanding of epidemiological status, detection of modes and sources of infection, and for design of the control program.

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