Home Hemodialysis Protects against Hepatitis C Virus Transmission

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Dear Sir,

The prevalence of seropositivity against the hepatitis C virus (HCV) amongst hemodialysis (HD) patients is high in developed countries. Most of the dialysis units report a relationship between the infection rate and the number of previous blood transfusions [1, 2]. Although time on HD appears to be an additional risk factor, it is usually related to a progressively higher proportion of transfused patients. Whether the prevalence of anti-HCV seropositivity in nontransfused HD patients is comparable to that found among blood donors in the same area remains debated. Of interest, persons considered at increased risk of acquiring HCV (blood recipients, intravenous drug users and HD patients) only account for half of the hepatitis C cases reported in the United States [3]. We are probably failing to recognize the importance of inapparent transmission of hepatitis C. Recent evidence underlines the risk of nontrans-fusional HCV infection among HD patients [4, 5]. Are HD units sources of HCV transmission for HCV-seronegative patients?

At present, we have 20 patients on home HD, 17 males, mean age 42 years, mean time on HD 50 months (5-134). Twelve of them have been transfused during this time, and only 2 of them have developed transient hepatic enzyme elevation. One episode was related to prolonged amiodarone treatment and the other occurred in a 62-year-old male patient on home HD since 1980, never transfused, who was admitted to our in-center HD unit from July to October 1984 (24 sessions) for reeducation with a different HD machine. In December 1984, he developed 10-fold AST and ALT elevation, resolved after 6 months. Since June 1985, he has been asymptomatic, and hepatic biochemical determinations were normal, but anti-HCV antibodies (ELISA

confirmed by RIBA test) have been detected in his serum since the first time he was tested in January 1991 and then in April and September. The remaining patients (19 of 20) have been repeatedly anti-HCV negative. At the time of this study, 29% of our 68 patients on hospital HD were anti-HCV positive. This strikingly higher prevalence of seropositivity in our in-hospital HD patients than in our home HD patients, similarly transfused and with comparable age and time on treatment, suggests that preventive measures, even isolation of seropositive patients, might be encouraged as they are widely accepted for HbsAg-positive patients. This appears the only effective measure to avoid inapparent HCV transmission in our dialysis units.

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