Hepatitis C Virus Infection and Hepatic Function in Chronic Hemodialysis Patients

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Table 1. Characteristics of HCV-positive and HCV-negative patients.

Figures in parentheses are percentages. HD = Hemodialysis.

Student's test.

χ^2 test (Yates with Kimball observation).

Sir,

Hepatitis C virus (HCV) infection has been recently recognised as an emerging problem in dialysis patients. The development [1] of a serological assay to detect anti-HCV antibodies has provided an opportunity to expand our knowledge of the epidemiology and natural history of this entity.

We have studied the prevalence of anti-HCV in a population of 177 patients on chronic hemodialysis using an enzyme immunoassay (HCV antibody ELISA test system, Ortho Diagnostics) based on the HCV C-100 antigen, and all assays were run in duplicate. We have correlated the results with age, time on hemodialysis, number of transfused and polytransfused patients and previous kidney transplantations. Moreover, GOT and GPT serum levels, determined by spectrophotometry every 3 months, were evaluated in a 15-year retrospective study. A value higher than twice the upper reference level was considered to be significant.

Eighteen patients (10%) were anti-HCV-positive; in this group (table 1), time on hemodialysis, number of polytransfused patients, and number of previous kidney transplantations were significantly higher than in the negative group. Most of the patients who were anti-HCV positive had raised transaminases, while there was no difference between the two groups regarding persistent (HBs-Ag-positive) and previous (anti-HBs- and/or anti-HBc- and/or anti-HBe-positive) HBV infection.

Our results show that: (a) the prevalence of anti-HCV positivity in hemodialysis patients in our Unit is in agreement with other Italian authors [2]; (b) anti-HCV seropositive-

ty is strongly correlated with the duration of dialysis and multiple blood transfusions as already reported [3]; (c) 9 (50%) anti-HCV-positive patients had never received transfusions, and several seronegative patients had received between 1 and 12 transfusions, clearly, there are other modes of transmission; (d) there is no correlation between HCV and HBV infection, in spite of other studies; (e) since some HCV patients are associated with a normal hepatic function, there is the need to test all hemodialysis patients; (f) the presence of most anti-HCV-positive patients with raised transaminases suggests that HCV plays a pathogenetic role in liver disease in hemodialyzed patients.

References

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