Hepatitis C Viraemia Is Spread by Dialysis – The Need for an Isolation Policy

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Dear Sir,

When the assay for hepatitis C viraemia (HCV) became available in 1989, we reported a 36% seroprevalence among our haemodialysis patients, and this rate increased to 70% on retesting the same sera using the second-generation ELISA [1]. Following the introduction of routine blood donor screening for HCV antibody and having further reduced the risk of HCV infection by the alternative use of erythropoietin during the last 3 years, we studied a new group of 36 patients receiving this treatment: 12 were males and 24 females (mean age 39.2 years). Only 2 patients had blood transfusion consisting of 2 screened units each. HCV antibody was detected in 14 (39%) patients; the seropositivity being higher in females (50%) than males (17%). The recombinant immunoblot assay (RIBA-2) confirmed 12 cases as positive and the other 2 as indeterminate. The 2 transfused patients were seronegative. When all 36 sera were tested for HCV RNA by polymerase chain reaction (PCR), HCV infection was confirmed in 13 (92%) of the 14 seropositive patients and in 1 seronegative patient who has subsequently seroconverted. These data show that HCV still occurs frequently among our patients and is not related to transfusion of blood products. Because community-acquired HCV infection, sexual or family contact can be ruled out on the basis of a low background seroprevalence in the general population (only 1.5% of Saudi blood donors being positive) [2], horizontal transmission between patients could be the mode of infection and might result from environmental contamination with the virus.

Despite regular sterilization and use of disposable dialysers, HCV may persist in the equipment. On the basis of our observations, we feel there is a need for policy of isolating seropositive patients on haemodialysis. However, until the much needed PCR assay becomes routinely available, we can only rely on current ELISA. That demonstrated a good correlation with PCR for identifying patients with active HCV.

References

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