Hepatitis G virus (HGV) prevalence in a Belgian population of chronic hemodialyzed patients

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A novel RNA virus of the Flaviviridae family has been recently identified and designated Hepatitis G virus (HGV). We have determined the prevalence of HGV-RNA among chronic hemodialyzed patients at the Liège University Hospital.

The presence of viral RNA in plasma was searched for by RT-PCR using specific primers chosen in the NS3 region of the viral genome. 82 patients were enrolled among whom 51 males (62.2%) and 31 females (37.8%) (mean age: 56.4 ± 16.4 years). Three patients were chronic HBs antigen carriers (4%) and 9 had HCV antibodies (12%). 70 were blood products recipients (85.4%) and 19 had history of both renal transplantation and transfusion (23.2%). Seven had elevated levels of transaminases (8.5%). The mean duration of hemodialysis was 5.8 ± 6.5 years.

Results: HGV RNA was detected in 13 patients (15.9%). Nine were infected by HGV alone (69%), 2 were coinfected by HBV (15%) and 2 were coinfected by HCV (15%). Twelve patients had received blood products at least once. One HGV positive patient had neither been transplanted nor transfused. Only 3 HGV+ patients had elevated levels of transaminases. One was coinfected by replicative HBV, one by HCV and one has a diabetic steatosis.

We conclude that HGV infection is quite common among this hemodialyzed population, with a prevalence of 15.9%, which is higher than the one observed for HBV or HCV. Moreover contamination is not only the result of transfusion and/or transplantation, suggesting the possibility of other routes of contamination. Since transaminase levels were normal among most patients, their usefulness as surrogate markers for this infection is quite questionable.