Is Transfusion the Only Risk Factor for HCV Infection among Hemodialyzed Patients?

P.		Maggi
F.		Petrarulo

Unità Operativa di Nefrologia e Dialisi, Ospedale di Altamura, Bari, Italy

Dr. Francesco Petrarulo, Unità Operativa di Nefrologia e Dialisi, Ospedale di Altamura, I-70022 Bari (Italy)

Dear Sir,

After the recent identification of hepatitis C virus (HCV) [1,2], the evaluation of the risk of contagion among patients [3] and staff members [4], became an important issue in the units of hemodialysis.

We read with interest the study of Dr. Moroni et al. [5] where the risk of HCV contagion in dialysis units is discussed.

In particular, they observed that: (1) the staff involved in the direct assistance of infected patients is at risk of HCV; (2) transmission of the infection appears to be closely related to blood transfusions; (3) HBcAb is a frequent occurrence among transfused patients.

Our data from 3 dialysis units confirm the presence of a percentage of anti-HCV positivity among staff members: in fact, 3/122 subjects were positive (2.45%); all seropositives were nurses with a positive past history for one or more parenteral contacts with patients' blood.

On the other hand, data derived from our patients show that there is a possibility of transmitting HCV infection in hemodialyzed patients never submitted to blood or derivative transfusions: in fact, 32/146 patients (21.9%) were anti-HCV positive with the ELISA test, confirmed by the RIBA technique; 9 of these patients (28.1%) had never received either blood or derivative transfusions. In our observation

, HBcAb shows a wider diffusion: data obtained from a study conducted in a single dialysis unit evidenced 57% (39/68) of anti-HBc positivity among patients before starting dialytic treatment and 42% (19/45) among staff members. Moreover, the low incidence of liver involvement among anti-HCV seropositive patients is noteworthy:

only 2 patients of 32 (6.25%) had signs of chronic viral hepatitis. In view of the fact that 50% of HCV-positive subjects among the free population are affected by chronic hepatitis [3], the low percentage observed in our dialyzed patients may be interpreted as the consequence of a status of immune tolerance.

In conclusion: (1) we confirm the evidence of a real occupational risk among nurses employed in dialysis units; (2) we underline the risk of non-post-transfusional HCV infection among hemodialyzed patients, and finally (3) we evidence the importance of further studies on the natural history of HCV hepatitis among patients affected by chronic renal impairment.

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