Prevalence of Epstein-Barr Virus Antibody in the Chronic Hemodialysed Population in the South of the Reunion Island

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Dear Sir,

Epstein-Barr virus (EBV) is becoming a concern due to its implication in oncogenesis [1], including lymphoma and carcinoma [2], particularly in immunocompromised patients [3]. Risk of neoplasia following renal transplant patients was calculated to be 14 and 40%, 10 and 20 years following transplantation, and is mainly made up of carcinoma and lymphoreticular tumors [4]. EBV reactivation is also a rare, but a life-threatening condition following renal transplantation [5]. Among chronic hemodialyzed patients, a higher incidence of EBV infection and activity assessed by high titers of VCA-IgG antibody has been reported, close to the Burkitt lymphoma and nasopharyngeal carcinoma levels [6]. Reunion island is a recently developed Indian Ocean French territory where chronic renal failure prevalence is twice that of the mainland, renal transplantation being promoted to improve patient comfort, and to limit health expenditure growth. We determined EBV status of chronic hemodialyzed patients treated in our regional hospital center.

In September 1995, antibody titers to VCA-IgG (indirect immunofluorescence, B95-8 line) and to EBNA-IgG (anticomplement immunofluorescence, Raji line) were performed on chronic hemodialyzed patients. Out of 55 patients, all were VCA-IgG-positive (> 1/80), 23 (41.8%) being 1/1,280

or higher. EBNA-IgG was positive in 53, 2 having more than 1/320 titers, the presence of antinuclear antibody making the test un-interpretable for 2. Two additional patients had discordant VCA and EBNA tests making their status undetermined. The final chronic hemodialyzed population EBV status was 49 positive (89%), 19 with high titers (34%), and 6 uninterpretable. No significant difference was observed in dialysis duration, age or gender among the 3 groups.

Almost constant EBV-positive values occur in the less than 5-year-old native population, like in lower socioeconomic groups [7] and developing countries [8]. The high incidence is not surprising in our study. We confirm that high levels of EBV antibody titers are common in hemodialyzed patients, in accordance with the findings of Yamamoto et al. [6], the

significance of which remains to be established. Along with possible long-term chronic hemodialysis complications [6], the outcome of transplantation of the high titers recipients should be prospectively studied, particularly lymphoma and carcinoma incidence.

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