

Letter to the Editor

HTLV-II among Pygmies from Cameroon

Editor: Studies performed in South and Central America showed that HTLV-II is endemic in indigenous Indian populations, suggesting that the origin of this virus is the New World.¹

In 1991, we detected HTLV-II infection by polymerase chain reaction (PCR) in people living in a rural area in Gabon (equatorial Africa).² Goubau *et al.*³ reported that antibodies specific to HTLV-II were highly prevalent in a group of Efe pygmies settled in northern Zaire. This finding provided a new insight as to the origin of this virus, as pygmies are isolated populations considered to be the oldest inhabitants of Central Africa. These results prompted us to study the HTLV-II seroprevalence in another group of pygmies living in Cameroon.

In 1984 scientists from the Institut Français de Recherche Scientifique pour le Développement en Coopération, Centre National de la Recherche Scientifique and Cameroonian Ministry of Scientist Research⁴ conducted a study, Food Anthropology of Cameroonian Populations, in three populations with different origins, living in the same ecosystem and having different survival strategies. This survey was carried out in the Campo district, which is situated on the Atlantic coast and on the border with equatorial Guinea and includes a rain forest game reserve. Three populations live in this area under identical climatic and phytogeographic conditions: the coastal Yassa, principally a fishing population; the Mvae agriculturalists and hunters; and the Bakola pygmies, traditionally hunter-gatherers, scattered throughout the forest. The Bakola practice rudimentary agriculture nowadays, but they also exchange game with neighboring agriculturalists for staple foods (cassava and bananas) and manufactured goods. The Yassa, and Mvae, and the Bakola are three Bantu-speaking populations. In the Campo district the human population density is low (1.3 people/km²). Most of the population is settled in villages.

A total of 301 subjects were studied (age range, 1–70 years): 125 from the Yassa ethnic group, 87 from the Mvae group, and 89 from the Bakola pygmy group. They were all healthy and negative for HIV infection.⁵

Sera were tested for IgG antibodies to HTLV-I/II by enzyme-linked immunosorbent assay (ELISA) (Ortho Diagnostics, Raritan, NJ). Positive sera were retested by Western blot, in which recombinant proteins specific for HTLV-I and HTLV-II are coated on each strip (Diagnostic Biotechnology, Singapore). The strips were interpreted as previously described.³

Of the 301 sera tested, 18 were positive by ELISA and they were retested by Western blot, which showed 7 were positive and the others indeterminate. Among the seven positive sera, four were anti-HTLV-II positive and three were anti-HTLV-I positive.

Antibodies specific to HTLV-I were observed in 1/125 (0.8%), 1/87 (1.1%), and 1/89 (1.1%) for the Yassa, Mvae, and Bakola pygmies, respectively. However, HTLV-II was only

present in pygmies with a prevalence of 4/89 (4.5%; 95% confidence limit, 0.1–8.9%). The four HTLV-II antibody-positive sera were from two women (24 and 69 years old) and two men (64 and 69 years old).

The presence of HTLV-II infection in this group of pygmies from Cameroon, which has had no evident contact with pygmies from Zaire for more than 5000 years,⁶ confirms that this virus is endemic among pygmies. The notion of ancient infection in pygmies is reinforced by the fact that in our study two other populations of different origins and living in contact with this group of pygmies for many centuries are not infected by HTLV-II.

The finding of Goubau *et al.*³ in Zaire and our results in Cameroon do not support the notion that the origin of HTLV-II is the New World.

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