Cases of peripheral neuropathy have been part of both epidemics (1,2). Both epidemics occurred in nutritionally deficient populations (1,3).

Dolin et al. state that the cause of the Tanzanian epidemic is unknown and probably difficult to establish; however, we believe findings from the Cuban epidemic could be used to study the etiology of this and other tropical epidemic neuropathies.

In Cuba, several research groups isolated and characterized an enterovirus in the cerebrospinal fluid (CSF) of epidemic neuropathy patients (4,5). Enterovirus sequences were found in CSF of 40 (36%) of 111 epidemic neuropathy patients versus 1 (8%) of 12 control surgical patients (p < 0.01, chi-square test with 2 x 2 contingency tables) (5). Recently, this enterovirus has been shown to form quasispecies, which could account for altered biologic properties (de la Fuente et al., submitted for pub.). We thus propose that epidemic neuropathy has a nutroviral etiology: Nutritional deficits and stress make the population more likely to become ill after infection with enterovirus quasispecies with altered biologic properties.

The relationship between the host’s nutritional status and virus evolution could be key in understanding the cause of epidemic neuropathy, the Tanzanian epidemic of optic neuropathy, and other tropical epidemic neuropathies. Etiologic factors must be identified before appropriate intervention and treatment strategies can be implemented.

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Risk for Ebola Virus Infection in Côte d’Ivoire

To the Editor: In Taï National Park, Côte d’Ivoire, where a new strain of Ebola virus was isolated (1), the World Health Organization is conducting a project to identify the reservoir of the virus and evaluate the risk for its emergence in local populations. In March 1998, we conducted qualitative and quantitative surveys of the villagers’ awareness of and risk for Ebola infection. In four villages close to Taï National Park (4 km to 10 km), we carried out structured interviews with 150 villagers and in-depth interviews with 17 villagers and three traditional healers.

Of the 150 villagers participating in the structured interviews, 18.0% had heard of Ebola (90.7% had heard of yellow fever). Of those aware of Ebola, 96.3% thought it life-threatening; 65.4% of them thought it preventable. When ill, 81.2% of the respondents generally relied on traditional healers or herbal medicine. During in-depth interviews traditional healers discussed their treatment practices. In one treatment, an incision is made on the skin and medicinal herbs are applied to the incision. Such traditional practices were implicated in the spread of Ebola virus in Gabon, where a traditional healer and his assistant (who were infected with Ebola virus) were suspected of spreading the virus to their patients through an unsterilized blade (1). The same practices would seem to pose a risk for virus transmission in Côte d’Ivoire.

Even though officially Taï National Park is protected from human activities to preserve its natural ecology, 84.0% of the 150 respondents to our survey often hunted or farmed in the park, 62.2% had encountered chimpanzees, and 53.3% had eaten chimpanzee meat. According to the in-depth interviews, chimpanzee meat is available at bush meat markets and is thought safe for eating, even though primates infected with Ebola virus have been linked with human cases (2,3).
Our survey results show that, even though no large-scale Ebola outbreaks have occurred in this area, villagers living near the park are at particularly high risk for infection because they are not aware of Ebola and do not know that their local customs and behavior may be putting them at risk. To prevent future Ebola epidemics in Africa, information, education, and communication (IEC) programs should be established (3). Moreover, further sociocultural studies on perceptions and behavior should be conducted in addition to exploring the nature of the virus and its cycle in the wild (2,4,5).

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