

population. The possibility of rare cases of HIV-1 and HIV-2 coinfections, recombinant HIV-1 and HIV-2 strains, and also peculiar HIV-2 variants from Central Africa, should be considered in Gabon. A possible entry of HIV-2 infection into Central Africa from Gabon in the near future could have major public health implications.

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References

1. World Health Organization. Global programme on AIDS. Recommendations for the selection and use of HIV antibody tests. *Wkly Epidemiol Rec* 1992;67:145-9.
2. Belec L, Martin PMV, Georges-Courbot MC, Brogan T, Gresenguet G, Mathiot CC, et al. Dementia as the primary manifestation of HIV-2 infection in a Central African patient. *Ann Inst Pasteur Virol* 1988;139:291-4.
3. Georges-Courbot MC, Moisson P, Leroy E, Pingard AM, Nerrienet E, Dubreuil G, et al. Occurrence and frequency of transmission of naturally occurring simian retroviral infections (SIV, STLV, and SRV) at the CIRMF Primate Center, Gabon. *J Med Primatol* 1996;25:313-26.
4. Delaporte E, Janssens W, Peeters M, Buve A, Dibanga G, Perret J-L, et al. Epidemiological and molecular characteristics of HIV infection in Gabon, 1986-1994. *AIDS* 1996;10:903-10.
5. Peeters M, Gershny-Damet G-M, Fransen K, Koffi K, Coulibaly M, Delaporte E, et al. Virological and polymerase chain reactions studies of HIV-1/HIV-2 dual infection in Côte d'Ivoire. *Lancet* 1992;340:339-40.

Q Fever in French Guiana: New Trends

To the Editor: Q fever, the endemic disease caused by the rickettsial organism *Coxiella burnetii*, was first described in French Guiana in 1955 (1). Only sporadic cases were reported until 1996 when three patients were hospitalized in the intensive care unit of the Cayenne Hospital for acute respiratory distress syndrome. One of the patients died. Many cases of Q fever were diagnosed in the general population at the same

time. A seroepidemiologic study was performed to determine whether the increase in cases was due to an increase in incidence or to an improvement in diagnosis. All paired samples of sera (acute-phase and convalescent-phase) from patients sent to the arbovirus laboratory for diagnosis of dengue infection from January 1, 1992, to December 31, 1996, were tested for antibodies to *C. burnetii* by immunofluorescence. All positive samples were also tested for immunoglobulin (IgM) by the same method; the IgG and IgM titers were determined by using a serial twofold dilution. A diagnosis of Q fever was made when there was a seroconversion from negative to positive or a twofold increase in IgG titer associated with the presence of IgM in the second sample.

One hundred and fifty-one of 426 paired sera collected between 1992 and 1996 were from patients recently infected with dengue fever. Twenty-five (9.1%) of 275 remaining sera were from Q fever patients. Significant differences were observed in the rates of Q fever in different years ($p < 0.01$); one (1.9%) of 53 was positive in 1992, five (9.1%) of 55 in 1993, five (8.6%) of 58 in 1994, three (4.8%) of 63 in 1995; a large increase was observed in 1996 (11 [23.9%] of 46). Differences by residence were also assessed. Rates of infection were higher in Cayenne (21 [13.0%] of 161) than in rural areas (4 [3.5%] of 114) ($p < 0.01$).

This study shows that cases of Q fever have occurred in French Guiana in recent years and that a significant increase in the incidence rate occurred in 1996. The reasons for this increase are unclear, and further studies of the epidemiology of Q fever in French Guiana are necessary. The epidemiology of Q fever is unusual in French Guiana because the rates of infection are much higher in Cayenne, the capital city, than in rural areas. No link with classical sources of infection (cattle, sheep, or goat birth products, or work in a slaughterhouse) was found. Indeed, Cayenne, with 80,000 inhabitants, is located near the Atlantic Ocean, and the prevailing winds blow from the sea. Airborne contamination from rural areas is therefore impossible. Furthermore, no large farm is in the immediate vicinity of the city. For identical reasons, contamination from the abattoirs is not likely; they are located on the west side of the city, near the Cayenne River, and the winds blow from the east. In our study, cases were almost equally distributed

throughout the city, although many patients came from the same area.

A seroepidemiologic study to determine possible new sources of infection (e.g., dogs, cats) and estimate rates of seropositivity in cattle and sheep and a case-control study on new cases are being conducted.

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Reference

1. Floch H. La pathologie vétérinaire en Guyane française (les affections des porcins, des caprins et des ovins). *Revue Elev Méd Vét Pays Trop* 1955;8:11-3.

Ixodes dammini: A Junior Synonym for *Ixodes scapularis*

To the Editor: The authors of "A new tick-borne encephalitis-like virus infecting New England deer ticks, *Ixodes dammini*" (1) provide useful information regarding a possibly new tick-borne encephalitis-like virus. However, the use of the name *Ixodes dammini* is not accurate for describing this species. *I. dammini* (Spielman, Clifford, Piesman, and Corwin) was synonymized with *Ixodes scapularis* (Say) in 1993 by Oliver et al. (2) and was redescribed in 1996 (3) to reduce confusion regarding identification. Keirans and colleagues summarize a wide array of rigorous studies involving hybridization, assortative mating, isozymes, and morphometrics, all of which provide evidence supporting the synonymization of the two tick species (3).

The synonymization of *I. dammini* with *I. scapularis* has been widely accepted. "*I. scapularis* (= *I. dammini*)" is still often used, but the use of *I. scapularis* as the sole nomen for this species is becoming more common (4). Oliver et al. (2) have established *I. dammini* as a junior subjective synonym of *I. scapularis*. If scientifically rigorous evidence exists justifying the reestablishment of the species name *I. dammini*, it must be published according to proper procedure. The proper nomenclature of any species, let alone one of such widespread notoriety and public health importance, is too important to be relegated to a

footnote. Until such evidence is presented, the continued misuse of *I. dammini* serves only to confuse health-care providers, public health professionals, and lay persons.

On a secondary matter, on page 167 of the dispatch, the authors state that "*I. (Pholeoixodes) cookei* is a one-host tick that is only distantly related to *I. dammini* and only rarely feeds on humans or mice" (1). *I. cookei* is a three-host tick (D.E. Sonenshine, pers. comm.), as are all the members of the genus *Ixodes*.

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References

1. Telford SR III, Armstrong PM, Katavolos P, Foppa I, Garcia ASO, Wilson ML, Spielman A. A new tick-borne encephalitis-like virus infecting New England deer ticks, *Ixodes dammini*. *Emerg Infect Dis* 1997;3:165-70.
2. Oliver JH, Owsley MR, Hutcheson AM, James C, Chen W, Irby S, et al. Conspicuity of the ticks *Ixodes scapularis* and *Ixodes dammini* (Acari: Ixodidae). *J Med Entomol* 1993;30:54-63.
3. Keirans JE, Hutcheson HJ, Durden LA, Klompen JSH. *Ixodes scapularis* (Acari: Ixodidae): redescription of all active stages, distribution, hosts, geographical variation, and medical and veterinary importance. *J Med Entomol* 1996;33:297-318.
4. Centers for Disease Control and Prevention. Lyme disease—United States, 1996. *MMWR Morb Mortal Wkly Rep* 1997;46:531-5.

The Name *Ixodes dammini* Epidemiologically Justified

To the Editor: Although a large body of evidence has been interpreted as supporting conspecificity of the deer tick (*Ixodes dammini*) and the blacklegged tick (*Ixodes scapularis*), according to Chapter VI, Article 23 L of the International Code of Zoological Nomenclature (1), "A name that has been treated as a junior synonym may be used as the valid name of a taxon by an author who considers the synonymy to be erroneous...."

Current use of *I. scapularis* to refer to the vector of Lyme disease obscures important epidemiologic issues. One of the reasons for "sinking" *I. dammini* was to make it easier to diagnose Lyme disease in areas where the disease was thought to be nonendemic: "The belief that *I. dammini* does not occur south of Maryland and that *I. scapularis* is a separate and