DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Centers for Disease Control
Center for Infectious Diseases
Division of Vector-Borne Infectious Diseases
P.O. Box 2087, Foothills Campus
Fort Collins, Colorado 80522

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State and Territorial Epidemiologists,

CDC has learned that some patients in the United States diagnosed with Lyme disease of the central nervous system have recently travelled to Mexico to receive experimental treatment with induced malaria, via infusion of whole blood from infected human donors. Such patients then have returned to the United States while still infected with malaria for monitoring of fever therapy by their physicians. Malaria donors reportedly had been screened for serologic evidence of syphilis, hepatitis B, and HIV.

A rationale for the use of induced (iatrogenic) vivax malaria in the treatment of Lyme disease was initially put forth by Dr. Henry Heimlich in a letter to the editor of the New England Journal of Medicine in April, 1990 (322:1234-1235). This suggestion was based on the obsolete and questionably effective practice of inducing malaria for the treatment of neurosyphilis during the pre-antibiotic era.

Reports that CDC endorses this practice for the treatment of any disease, or has entered into a collaboration with Dr. Heimlich or others to supply Plasmodium vivax for use in the treatment of Lyme disease, are false. Specific concerns about the use of induced vivax malaria for the treatment of Lyme disease include the following:

- The lack of a justification for experimental therapy when effective antibiotic treatment is available for Lyme disease, including CNS manifestations.
- The absence of published evidence concerning the efficacy of malariotherapy in Lyme disease, and the lack of FDA approval.
- The small but finite risk of fatality from induced vivax malaria, principally due to splenic rupture.

- The risks of co-transmission of blood-borne infections which may not be adequately screened for, e.g., Chagas' disease, dengue fever, falciparum malaria, NANB hepatitis, and HTLV-1.

- The small but finite risk of secondary malaria transmission from patients who return to the United States with malaria.

Nevertheless, public health officials should be aware that the use of malariotherapy in Lyme disease is likely to increase and that such cases may come to their attention. These should be reported to CDC as imported malaria (induced) cases. It would be helpful if such case reports include a notation indicating a relationship to the treatment of Lyme disease. This will aid CDC in monitoring this practice nationally.

David T. Dennis, MD, MPH
Chief, Bacterial Zoonoses Branch
DVBID/CID/CDC
(303) 221-6418

Carlos C. Campbell, MD, MPH
Chief, Malaria Branch
DPD/CID/CDC
(404) 488-4046

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