Human babesiosis in Taiwan: Asymptomatic infection with a Babesia microti-like organism in a Taiwanese woman

鍾文政

Shih CM;Liu LP;Chung WC;Ong SJ;Wang CC

摘要

Abstract

An asymptomatic Babesia infection was confirmed by laboratory diagnoses. The intraerythrocytic protozoan (designed TW1) isolated from a 51-year-old Taiwanese woman appeared to be morphologically consistent with small-form piroplasm, and measurementsindicated that it had a body size of 1.5 to 2.5 microm in diameter. The typical features of ring, binary, and tetrad forms were observed in Giemsa-stained thin blood smears. A persistent and low-grade parasitemia was established after hamster inoculation. Indirect immunofluorescent-antibody reactivities indicate that this strain (TW1) of Babesia was serologically related to, but not identical to, the Babesia species (B. microti) that infects rodents. Antibody titers in the patient's sera combined with the clinical symptoms suggested that the present case was a chronic and subclinical babesial infection. A neighborhood human serologic survey indicated that the infection may have been acquired accidentally from an infected rodent and localized within the samefamily. Indeed, rodents from areas around the neighborhood were trapped, and a high prevalence (83%) of babesial infection was observed. The possible vector responsible for the transmission remains to be identified