bim, a New Serovar of Leptospira interrogans Isolated from a Dog in Barbados

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A new serovar of *Leptospira interrogans* was isolated from a dog in Barbados. The proposed name of the new serovar is *bim*, and the designated type strain is 1051. The serogroup of the new serovar is the Autumnalis serogroup. The new serovar was subsequently isolated from six patients with leptospirosis in Barbados.

In a study of canine leptospirosis in Barbados, the blood and kidneys of 130 dogs were cultured for *Leptospira interrograns*. Only two dogs were culture positive; serovar *copenhageni* was isolated from one, and a previously undescribed serovar was isolated from the other.

The new serovar was isolated from a stray dog that did not appear ill and was afebrile. Both blood and kidney tissue from the dog were cultured in Ellinghausen-McCullough-Johnson-Harris semisolid medium (2); Leptospira organisms were isolated only from the kidney sample. Serovar status of the isolate was determined by cross-agglutination and reciprocal agglutinin absorption tests at the Centers for Disease Control, Atlanta, Ga. (1).

Cross-agglutination tests revealed that the serovar was a member of the Autumnalis serogroup. The serovar agglutinated in *autumnalis* hyperimmune antiserum at a titer of 1:25,600, compared with titers of ≤1:400 in hyperimmune antiserum for serovars representing other serogroups.

Reciprocal agglutinin absorption tests revealed that the new serovar differed from previously described serovars of the Autumnalis serogroup (alice, autumnalis, bangkinang, bulgarica, butembo, djasiman, erinacei-auriti, fort-bragg, gurnugi, huallagensis, lanka, louisiana, mooris, orleans, rachmati:, sentot, and weerasinghe). The new serovar reacted to at least 6% of the homologous titer with antiserum to all previously described members of the serogroup. Conversely, antiserum against the isolate retained 10% or more of its

homologous titer after cross-absorption with other members of the serogroup.

The proposed name for the new serovar is *bim*, a local nickname for Barbados. The type strain has been designated as 1051, and it is maintained in the permanent *L. interrogans* serovar collection at the Centers for Disease Control.

The human health significance of bim was subsequently demonstrated. Of 71 patients hospitalized with leptospirosis in Barbados during the period of January 1981 to May 1982, 37 had high microscopic-agglutination titers of fort-bragg and autumnalis, suggesting infection with a serovar in the Autumnalis serogroup (1). Leptospira organisms were isolated from 7 of these 37 patients, and six of the isolates were identified as bim. Whether dogs or other animals are the primary reservoir of bim remains undetermined.

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