

LETTER TO THE EDITOR

ANTICARDIOLIPIN ANTIBODIES AND SEVERE LEPTOSPIROSIS

October 15, 2002

Sir,

A recent publication of DAHER *et al.*² reports the presence of anticardiolipin antibodies (ACL) in leptospirosis patients and thus confirms another previous Brazilian study⁷. Questions regarding the inducing mechanism of ACL and their pathologic significance in acute settings remain open.

In leptospirosis, as in other infections, the trigger of ACL production remains elusive. Are ACL induced by the release of endothelial cryptic autoantigens, or by cross reactivity, or by an hypothetical leptospire superantigen? Indeed, infections are reported as precipitating conditions of the catastrophic antiphospholipid syndrome, supposedly by a mechanism of molecular mimicry³. However, studies of Lyme disease, another spirochete infection, have not provided convincing clues to molecular mimicry: anticardiolipin and anti spirochete antibodies were described as separate populations⁵. In human leptospirosis, the induction of ACL by molecular mimicry remains unproved yet and deserves to be addressed by dedicated studies.

Acute complications of leptospirosis have focused attention, due to their potential lethal outcome and pulmonary hemorrhage outstands among them. ACL pertain to the definition of the antiphospholipid syndrome and alveolar hemorrhage is an acknowledged complication of this syndrome⁴. Then, the implication of ACL in leptospirosis pulmonary bleeding is a tempting hypothesis. In the antiphospholipid syndrome, pulmonary hemorrhage seems to be related to microvascular thrombosis, with or without capillaritis⁴. However, comprehensive immunochemical and ultrastructural studies have been performed in Brazil as well, and such microthromboses were not mentioned^{6,8}. The implication of an immunopathological process in leptospirosis pulmonary hemorrhage has to be considered: it could provide a rationale to therapeutic options already proposed, such as corticosteroid boluses^{1,9}. An established proof of such a process would be valuable and awaits additional evidence.

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