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VALIDATION OF THE DIRECT IMMUNOFLUORESCENCE TEST FOR THE DIAGNOSIS OF AMERICAN CUTANEOUS LEISHMANIASIS IN BRAZIL

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ABSTRACT

Background: Cutaneous leishmaniasis is a public health problem whose diagnosis depends on the various methods used together to get better sensitivity and specificity. The Direct immunofluorescence (DIF) is a method for the diagnosis of American cutaneous leishmaniasis (ACL) has not been largely studied.

Objetive: to validate DIF for the diagnosis of ACL.

Patients/Methods: this study included 72 patients with confirmed diagnosis of ACL to determine sensitivity and 55 patients with skin lesion, but carriers other diseases to determine specificity. For each patient, were obtained skin biopsy imprints on glass slides. In the next step, was added fluorescein-labeled polyclonal antibody diluted 1:20. Positivity was considered based on the finding of intra or extracellular fluorescent oval-shaped amastigotes.

Results: the clinical results showed a predominance of cutaneous form (84,9%) and only 15,1% of mucosal form. The direct immunofluorescence showed sensitivity of 72,2 ± 10,4% (n = 72, CI 95%) and specificity was 96,3 ± 5,0% (n = 55, CI 95%). The positive predictive value was 96,3 ± 4,3% (n = 74; CI 95%), negative predictive value was 72,6 ± 10,1 (n = 75; CI 95%) and accuracy was 82,7%. Thirty five (89,7%) of 39 samples were identified as *Leishmania Viannia* subgenus by PCR-RFLP.

Conclusions: the indicators of validity were satisfactory and another advantage was quick diagnosis. Therefore, we believed that DIF was validated for the diagnosis of ACL in Brazil.

KEYWORDS: American Cutaneous Leishmaniasis, Diagnosys, Direct Immunofluorescence, Leishmania Viannia Braziliensis

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