

**IX ENCONTRO DO INSTITUTO ADOLFO LUTZ
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**M-011-22 EVALUATION OF IgM DOT BLOT WITH GLYCOLIPOPROTEIN FROM
PATHOGENIC AND SAPROPHYTIC LEPTOSPIRES FOR SERODIAGNOSIS OF
HUMAN LEPTOSPIROSIS**

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Resumo

Leptospirosis is one of the infectious diseases that is widespread over global regions and could be deadly in some cases. Thus, the development of rapid and specific diagnostic tools which can achieve early detection of the disease before complications occur are deemed highly desirable. The aim of this study was to develop a simple, specific, rapid and inexpensive test for early diagnosis of human leptospirosis. Methods: A total of 180 serum samples from 90 patients diagnosed with leptospirosis were analysed by IgM Dot Blot with glycolipoprotein (GLP) antigen from *Leptospira interrogans* serovar Copenhageni and *Leptospira biflexa* serovar Patoc. The results were compared with those obtained with microscopic agglutination test, the gold standard reference serological method. Serum samples from 108 healthy blood bank donors selected randomly and screened negative by the MAT test were used as negative controls to establish the specificity of the assay. The IgM Dot Blot was inspected visually by two experienced independent observers who were blind to all information. Results: The specificities of both GLP-based assays were 100% with serum samples from negative control. With serum samples from patients with acute leptospirosis, sensitivity was 76.6% with IgM Dot Blot Copenhageni and 90% with IgM Dot Blot Patoc. With serum samples from patients in convalescence, sensitivity was 100% with both GLP-based assays. Conclusions: This IgM Dot Blot showed to be efficient for serodiagnosis of leptospirosis during all phases of illness and could be a good alternative method for the early diagnosis of leptospirosis. Also, the test is suitable for identifying a large number of samples and, hence, reducing the death rate of patients with leptospirosis. Thus, it could be used as an initial screen for leptospiral infection in all laboratories, with subsequent confirmation by MAT.