Proteins Selected in *Leishmania infantum* by an Immunoproteomic Approach with Potential Serodiagnosis Applications for Visceral Leishmaniasis.

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Visceral leishmaniasis (VL) is a disease of chronic evolution which could be uniformly fatal, if left untreated. Although, VL in patients especially from known endemic areas, is usually diagnosed clinically, more often the signs and symptoms are inconclusive and mistaken with other coendemic diseases. The serodiagnosis presents some problems, such as the low level of antileishmanial antibodies found in the majority of patients, as well as the cross-reactivity in patients infected by other trypanosomatides. In the present study, aiming to identify antigens in the total extracts of stationary-phase promastigote forms of *Leishmania infantum* for their use in ELISA experiments, an immunoproteomic approach was performed employing sera from VL patients. Sera samples VL patients with well-established diagnosis of the symptomatic disease, as well as sera of healthy and non-infected subjects living in endemic area of VL and sera of Chagas´ disease patients, were used in the immunoblotting assays. In the results, protein spots recognized only by antibodies from VL patients were identified; and a total of 17 proteins were revealed. From the identified 17 proteins, eight of them are considered hypothetical proteins. Previously known proteins as virulence factors, diagnosis markers and/or vaccine candidates, as well as drug targets; were identified. The present study represents a contribution in identifying antigenic *L. infantum* proteins, as well as in revealing the expression of eight new hypothetical proteins in this parasite species. All antigens revealed in this study could be applied in future works for the improvement of the sensitivity and specificity for the serodiagnosis of VL.

Keywords: Visceral Leishmaniasis; serodiagnosis, immunoproteomic;

Financier agency: COLTEC/UFMG, FAPEMIG, CNPq.