SEROLOGICAL LEVELS OF INTERLEUKIN-10 IN PATIENTS INFECTED WITH *LEISHMANIA CHAGASI*

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Visceral leishmaniasis caused by *Leishmania chagasi* is endemic in Rio Grande do Norte. Leishmania is an intracellular pathogen of macrophage and induce an altered immune response leading to distinct clinical outcome in humans, varying from asymptomatic self healing infection to severe visceral leishmaniasis. Interleukin 10 (IL-10) is an immune modulatory cytokine and inhibits macrophage activation, in addition to suppression of TH1 responses. We determined the IL-10 levels in subjects exposed to *L. chagasi*. Our hypothesis was that IL-10 levels influenced clinical outcome after *L. chagasi* infection. We determined IL-10 in sera of subjects residing in area endemic for *L. chagasi* in Rio Grande do Norte. All subjects underwent a physical examination, assessment of DTH and antibodies to leishmania. Based on clinical and laboratory evaluation, subjects were grouped in 3 categories: visceral leishmaniasis (VL), self resolution of *L. chagasi* infection (DTH+) and exposed subjects without immunological marker of infection (DTH- and negative anti-leishmania antibodies). VL subjects presented higher levels of IL-10 when compared to subclinical or exposed subjects. Male subjects present higher levels of IL-10. The levels of IL-10 also varied with the age groups. In summary, IL-10 levels are associated with distinct clinical outcome of *L. chagasi* infection.

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