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### Case report – human tegumentary leishmaniasis

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#### ABSTRACT

**Introduction:** Leishmaniasis is a serious public health problem in Brazil and in the world. It is considered one of the six most important infectious diseases in the world and is endemic in 88 countries. The objective of this study is an account of the case of a patient attended by Dermatology Department from Clinical Hospital at the Federal University of Pernambuco, which was admitted with clinical suspicion for leishmaniasis in the year 2013 and had your lesion evaluated through histopathological, molecular and also with stress and cellular inflammation markers, Hypoxia-inducible factor, HIF-1 $\alpha$ . The patient had a lesion located in the nose, which was initially submitted to biopsy after four months of evolution. Subsequently, the material was submitted to the paraffinization procedure and after to included in the dermatology collection and analysis. Slides with sections of the material were stained with Hematoxylin / Eosin for histopathological analysis performed at the Hospital, and others were not stained for the immunohistochemical study, performed with peroxidase system and HIF-1 $\alpha$  detection occurred in the nucleus and / or cytoplasm of macrophages and it was performed by Laboratory of Tropical Disease from Department of Biology at University of Campinas and analysis by molecular biology was done by deparafinisation of fragments and subsequent DNA extraction with Promega® kit followed by PCR performed at the Aggeu Magalhães-Recife research center. Histopathological medical report classified the lesion as differentiated Spinocellular Carcinoma and did not report presence of parasite, while the PCR was positive for *Leishmania braziliensis*, and the evaluation for HIF-1 $\alpha$  was observed by strong marking (3+). Histopathological analysis is the only diagnostic tool used in HC-PE, which may complicate the manipulation and treatment, and cases like this show us the need for methods that corroborate for a more concise and differential diagnosis, when necessary. Using specific and sensitive techniques are important by leishmaniasis cases confirmation in the State.

**Key words:** Leishmaniasis, Injury, Diagnosis

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