

TITLE: CLINICAL-HISTOPATHOLOGICAL CHARACTERIZATION OF LOBOMYCHOSIS IN RONDÔNIA

AUTHORS: PORTO, A.S.^{1,3,5}; SALCEDO, J.M.V.^{2,3}; CUNHA, C.R.³; FERNANDES, V.O.³; PORTO, A.S.⁴
SANTIAGO, T.S.⁵; KORTE, R.L.^{3,5}

INSTITUIÇÃO: 1. FUNDAÇÃO OSWALDO CRUZ- FIOCRUZ-RJ (Av. Brasil, 4365 - Manguinhos, Rio de Janeiro - RJ, 21040-900), 2. FUNDAÇÃO OSWALDO CRUZ – FIOCRUZ-RO (R. da Beira, 7671 - Lagoa, Porto Velho - RO, 76812-245, 3. UNIVERSIDADE FEDERAL DE RONDÔNIA – UNIR (Campus - BR 354, Km 9,5, CEP 76801059, Porto Velho - RO, BRASIL), 4. INSTITUTO FEDERAL DE RONDÔNIA – IFRO (R. Rio Amazonas, 151 – Jardim dos Imigrantes, Ji-Paraná - RO, 78960-000), 5. HOSPITAL DE BASE DR. ARY PINHEIRO (Av. Gov. Jorge Teixeira, 3766, CEP 76821092, Porto Velho –RO, Brasil).

ABSTRACT: Lobomycosis, caused by the fungus *Lacazia loboi*, is a rare disease, with chronic evolution, neglected and endemic to the Amazon Region. It is characterized by keloid-like lesions, in plaques or ulcerated, with a deforming character. Microscopically, it presents fibrosing granulomas in the skin and subcutaneous tissue, with giant cells filled with rounded fungal structures. Due to the inability to isolate and cultivate the fungus, studies are scarce. This work was based on the histopathological analysis of 22 skin biopsies from the Hospital de Base Dr. Ary Pinheiro (HBAP) in Porto Velho/RO. Of the cases analyzed, 81.8% are male and the average size of the lesions is 2.0 cm and 95.45% had a keloid-like appearance, with 31.81% located in the external ear pavilion, 22.72% upper extremities, 18.18% in the chest, 13.63% in the lower extremities, 4.54% multicentric, 4.54% in the pelvic region and 13.63% in unspecified areas. The microscopic study showed that 77.27% had compromised resection margins and 22.7% had ulceration. All cases had a sporulated monomorphic pattern, with budding in 45.45%. Fibrosis was characterized as severe in 59.09% and moderate in 31.81%. Late fibrosis was evidenced in 95.45% and recent and late in 40.90%. Lesions affected the epidermis in 18.2%, papillary dermis in 31.8%, Grenz's zone in 36.4% and reticular dermis in 13.6%. Lesions involved subcutaneous tissue in 59.1% and deep dermis in 40.9% of cases. Regarding the origin of the cases, 75% live in an urban area, but with a previous history of housing in a rural area. About the level of school education, only one had university level. The other patients were of low education level or illiterate. The evolution time ranged from 20 to 47 years. In all cases, the lesions recurred. Furthermore, we infer that Lobomycosis, in these samples, is predominant in men with a keloid-like pattern and affects exposed areas, probably related to the time they worked in the countryside. The compromised resection margins observed in most cases are the main factor responsible for recurrence. The extension superior to the epidermis is related to its ulceration, where fungal structures were seen in the middle of the fibrinoleukocyte crust. The pattern of severe and old fibrosis was compatible with the evolution time of the cases. Vascular, perineural and perianaxial invasion was not evidenced in any of the samples.

Keywords: Lobomycosis, *Lacazia loboi*, Lacaziosis, keloid mycosis, Jorge Lobo Disease.

Development Agency: Porto Medicina Diagnóstica e Hospital de Base Dr. Ary Pinheiro.