

Lagochilascaris minor IN A PATIENT FROM THE COLOMBIAN AMAZON: A CASE REPORT

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SUMMARY

A chronic infection (10 years) by *Lagochilascaris minor* is described in a woman from the amazon region of Colombia. This is the third case of infection by this parasite that has been described so far in Colombia, and only the first one in a person coming from the Colombian Amazon region.

KEYWORDS: *Lagochilascaris minor*; Tissue parasitism; Colombia

INTRODUCTION

Occasionally *Lagochilascaris minor* can infect man causing chronic lesions in the soft tissues of the oropharynx, head and neck as has been reported in patients from Brazil, Colombia, Costa Rica, Mexico, Surinam, Tobago, Trinidad and Venezuela⁵.

The genus *Lagochilascaris* belongs to the phylum Nematoda¹. Five species of this genus have been described: *Lagochilascaris major*, *Lagochilascaris buckleyi*, *Lagochilascaris turgida*, *Lagochilascaris sprengi* and *Lagochilascaris minor* which was found naturally infecting wild Felidae, dogs, domestic cats and men in some Central and South American countries^{3,5,8}.

Two previously reported Colombian cases came from the Urabá region, in the west of the country². The present article reports a case of *Lagochilascariasis* originating from Miraflores (Guaviare) in the Colombian Amazon region.

CASE REPORT

This case came from Miraflores, a town located in the Guaviare department. The area is in the south-east of the country, 01° 22' 13" latitude north and 71° 57' 41" longitude west, lying at an altitude of 180 m. above sea level, in an area of tropical rain forest⁶. An indian woman, aged 41, presented a clinical picture of 10 years' evolution, characterized by repeated episodes of tonsillitis, coughing fits accompanied by the

expulsion of "white worms". Additionally, the patient reported that in the last four years she had presented odynophagia, hyporexia and weight loss without apparent cause (approximately 10 kg).

Physical examination revealed whitish worms, approximately 15-20 mm in length in the tonsil walls and the oropharynx.

Results of the patient's paraclinical analysis were as follows. *Iodamoeba butschlii*, *Entamoeba histolytica* and *Entamoeba coli* cysts appeared in a fecal specimen. The blood count results were 11.3% haemoglobin, 34% haematocrit, 9900/mm³ leukocytes. Leukocytic formula was: 64% neutrophils, 6% eosinophiles, 28% lymphocytes, 2% monocytes and 0% basophiles. Immunoglobulin classification showed IgG, IgA, IgD, IgE being within normal limits, IgM slightly increased: 372 mg/dl.

Parasites obtained were fixed in a 10% formaldehyde solution, then rinsed and placed on permanent mountings. The parasite was classified as being *L. minor* based on the following characteristics: the size of the female was approximately 20 mm in length and that of the male 12 mm, the presence of two subventral lips and one subdorsal lip in the anterior part without denticles and a well-developed interlabial structure, the position of the vulva in the posterior middle of body, the presence of preanal bulkiness in the female, and subterminal spicula shorter than the ejaculatory duct in the male similar to that has been described previously⁸ (Fig. 1).

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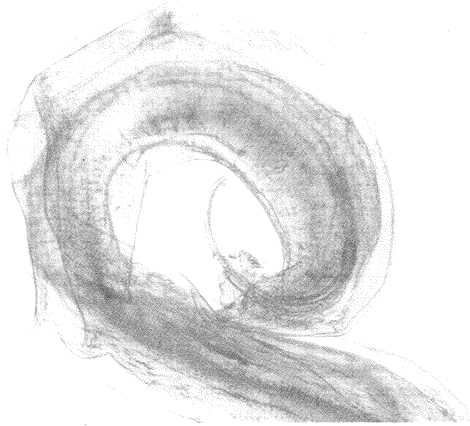


Fig. 1 - Terminal segment of male shows the spicule and ejaculatory duct (40 X)

Once the diagnosis was confirmed, treatment was begun with a 15 mg/kg/day dosage of albendazole for 30 days. However, in this case due to problems of secondary effects and the suspension of the same by the patient, it was only possible to confirm transitory elimination of adult worms.

From the epidemiological point of view, the patient had always lived in a rural zone having deficient hygienic conditions. In addition, she reported having eaten the flesh of certain wild rodents such as *Hidrocheris hidrocheris* (copybara), *Tayassu tajacu* (wild boar) and *Agouti paca* (lapa). None of the other family members had presented a similar infection.

DISCUSSION

The cases of lagochilascariasis reported to date present similar clinical pictures, especially characterized by lesions in the oropharynx and other soft tissues in the head and the neck region^{2,4,5} the tonsillar involvement as described in this case, being unlike. This patient did not present any apparent compromise of the immunological system nor predisposing infections.

This case constitutes the third case from Colombia and the first from the Colombian Amazon region, since the other two as described by BOTERO & LITTLE (1984)² originated from the jungle frontier region with the Republic of Panama in the northwest of the country near the Caribbean sea.

L. minor's life cycle is still not fully explained. Experimentally, animals such as mice, dogs and cats have been infected with laboratory-incubated eggs^{3,9}. To provide follow-up for infected mice, third stage larvae were obtained, which were encysted in different tissues, especially muscular and adipose tissue. In dogs and cats on the other hand, the cycle did not continue, possibly because larvae were destroyed by gastrointestinal juices. However, if dogs and cats swallowed infected meat having third stage larvae, they completed the cycle to the point where adult worms were formed, being localized in soft tissues, producing lesions similar to those observed in humans. All larval forms were found in these

lesions, which gives credence to the autoinfection hypothesis and therefore to the cycle's perpetuation in the same host: Man is an accidental host, in whom it has been possible to isolate all developmental stages whom possibly becomes infected by eating raw meat from wild rodents harboring L₃ larvae. In this case, the patient described had a history of eating meat from wild rodents, a common finding which confirms this hypothesis. However, autoinfection may occur which would explain the chronicity of this parasitic infection in cases as the one described. Another fact which may confirm this hypothesis is the chronicity of this disease, since the majority of reported cases have large evolutionary histories. On the other hand, bearing in mind the chronic nature of this disease and the fact of dealing with an infection by a tissue nematode, attention is called in this case to eosinophile absence and normal levels of IgE, since it is well-known that high IgE and eosinophile levels are frequently found in parasites having these characteristics.

Different surgical and pharmacological treatments have been tried. Chemotherapy includes the use of drugs such as levamisole¹⁰, thiabendazole^{2,7}, mebendazole², albendazole, cambendazole⁵ and ivermectin¹ have been tried. According to these studies, the most efficient drugs are levamisole and cambendazole. Unfortunately in this case it was not possible to administer them since they are not available for human use in Colombia.

RESUMO

Lagochilascaris minor em paciente da Amazonia colombiana: relato de caso

Infecção crônica (10 anos) por *Lagochilascaris minor* é descrita em mulher da região amazônica colombiana. Este é o terceiro caso de infecção por este parasita que é descrito até agora na Colombia, e o único em pessoa proveniente da região amazônica colombiana.

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