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RESEARCH NOTE

ISOLATION OF *LEISHMANIA GUYANENSIS* FROM LESIONS OF THE NASAL MUCOSA

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Although *Leishmania guyanensis* has been held responsible for cases of mucocutaneous leishmaniasis (Pessoa, 1961, *Arq. Hig. Saúde Pública, 26:* 41-50), there was until recently no conclusive evidence that mucosal lesions are caused by neotropical leishmanias other than *L. braziliensis (sensu strictu)* (Lainson & Shaw, 1987, in: Peters & Killick-Kendrick *The Leishmaniases in Biology and Medicine, 1:* 96), except in patients with an impaired cellular immune response (Sampaio et al., 1985, *Rev. Soc. Bras. Med. Trop., 18:* 273-274).

We recently isolated parasites from mucosal lesions in three patients from the region north of Manaus, where cutaneous leishmaniasis due to *L. guyanensis* is very frequent. The parasites were characterized as *L. guyanensis* by morphology, behaviour in hamsters and growth in blood-agar culture medium (Difco B45). This result has now been confirmed by zymodeme analysis (Hooman Momen, personal communication), and serodeme analysis using monoclonal antibodies B19, B7, B13, B12, B5, B3, B11, B16 and B18 (Gabriel Grimaldi, personal communication).

Stock code MHOM/BR/87/IM-3247: The patient was a 53 year old male farmer resident at Estrada do Tarumã, periphery of Manaus. He had two typical scars, on the right arm and the right leg, which he said were due to lesions which had healed one year previously after taking glucantime to a total of 121 ampoules. He complained of a nasal lesion of six months duration. An ulcerated, granulomatous, crusted, bleeding lesion affecting areas of the floor of the nose, septum and head of the inferior turbinate was observed in the left nostril. Smears from biopsy of the lesion were positive for amastigotes.

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Stock code MHOM/BR/87/IM-3258: The patient was a male soldier resident at km 140 on the BR 174 highway, where he acquired a skin ulcer on the right leg which had healed after taking 20 ampoules of glucamtime five years previously. He complained of a lesion in the right nostril of ten months duration with rhinorrhagia, pain and impairment of normal respiration. Smears of biopsy material from an ulcerated, crusted, granulomatous lesion of the right septal mucosa were positive for amastigotes.

Stock code MHOM/BR/88/IM-3471: The patient was a 24 year old male warehouse clerk from Manaus, resident at Vila Pitinga (200 km to the north of the city). He had 20 cutaneous lesions on various parts of the body, of two months duration. One month before examination he had noted a lesion of the nasal mucosa. On the right septal mucosa there was an ulcerated, granulomatous, crusted lesion approximately 15 mm in diameter with a clearly defined border. On the left mucosa there was an ulcerated, crusted, granulomatous lesion approximately 5 mm in diameter on the floor of the nose. Smears from biopsy material from the right mucosa and two contemporaneous cutaneous lesions on the thorax and wrist were positive for amastigotes.

Leishmanin skin test reactions were strongly positive (13-16 mm induration diameter) in all three cases. In none of these patients was there any sign of facial cutaneous lesions which could have involved the mucosa by contiguous spread. The patients were treated with intramuscular pentamidine isethionate to total doses of 1200 mg, 1000 mg and 720 mg, respectively, with complete healing in all cases. We conclude that *L. guyanensis* occasionally causes mucosal leishmaniasis in otherwise apparently healthy subjects, probably by metastatic spread from primary cutaneous lesions.

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