

Case report

Ulcerated labial lesion

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CASE SUMMARY

The patient, a 53 year old man, born in the Province of Misiones (Argentina) where was rural worker and live in Buenos Aires outskirts from 30 years ago. This patient came from semi-tropical areas of Argentina where the rain fall annual average is 1800 mm/year, the relative humidity 90% and the annual temperature is between 28°C and 42°C. He advised by an ulcerative and painful lesion in the mucous membranes of the superior labium, as observed in Figure 1, with two months of evolution.

The patient referred the presence of productive cough, chest pain, fatigue and loss of weight in the latter months, but the chest radiological study reveals minimal changes as discrete fibrosis.

The bacilloscopy of reiterate samples of sputum for Mycobacterium as well as the microbiologic study for other common bacteria and fungi were negative. General laboratory revealed nonspecific pathological changes as increased sedimentation rate, and the white cells count showed leukocytosis (10.000/mm³) with slight eosinophilia (15%).

A biopsy of the lesion by histopathological and microbiological studies was performed, and the results of the microscopy of the histopathological sections, stained with Grocott and PAS are observed in the Figure 2.

What is the diagnosis ?

ANSWER TO PHOTO QUIZ

DIAGNOSIS: Paracoccidiomycosis

Paracoccidiomycosis (South American Blastomycosis) is caused by a thermally dimorphic microorganism: *Paracoccidioides brasiliensis*, a fungus that lives on ground and vegetation. Its habitat is restricted to tropical and subtropical regions of Mexico, Brazil, Ecuador, Colombia, Venezuela, Paraguay and Argentina.

It is associated with a broad spectrum of clinical manifestations and has been classified into acute or sub-acute, juvenile form, and chronic forms. The latter is the most common type and usually affects male agricultural workers in rural communities. The disease typically begins in the lungs producing varying degrees of parenchymal damage, and in a significant number of cases the organism spreads through bronchogenic, lymphatic, or hematogenous routes to involve 1 or more organs. It is suggested that a failure of the immunologic system would be found in those affected by the disease and there would be a strong resistance in the majority of the population exposed or within the endemic area of the infection^[1].

Among the multiple localization, produced by the blood stream of the *P. brasiliensis* from the primary pulmonary infection, are most frequent the lesions in the oral and nasal mucosa and in the skin in their around^[2].

The differential diagnosis must be principally performed with other systemic mycoses, leishmaniasis and tuberculosis; but the definitive diagnosis is achieved by mycological methods (microscopy and cultures) and serology (search of specific antibodies)^[2,3].

In the clinical samples as respiratory secretions or others (in wet mount preparations) and histopathological sections (stained with Grocott and PAS, as in Figure 2 and 3, respectively), *P.*

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Figure 1: Ulcerative and painful lesion located in the mucosa of the superior labium.

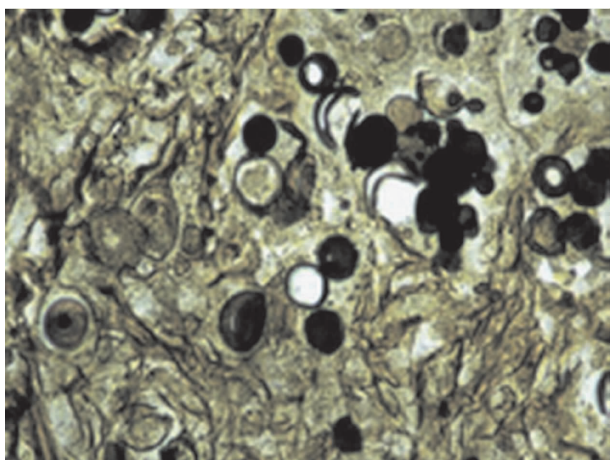


Figure 2: Budding yeasts of *Paracoccidioides brasiliensis* in a histopathological section of the lesion stained with Grocott (400x).

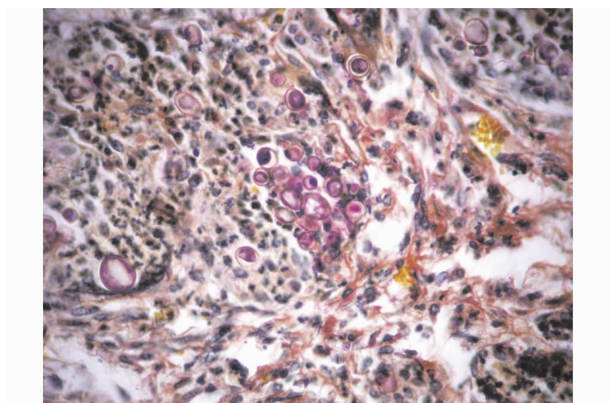


Figure 3: Abundant yeasts of *Paracoccidioides brasiliensis* in a histopathological section of the lesion, stained with PAS (400x).

brasiliensis is observed as globose yeast cells with multiple buds, with 3 to 30 μ m in diameter. The cells are spherical, oval or elliptical, have a thick refractive wall; and may occur in chains of four or more. The positive result of the specific serology is associated in more than 90% of cases with active disease and the cultures can be result laborious and slow [1,2].

Once diagnosed, the patient was treated with itraconazole, at the daily dose of 200 mg, during at least 6 months, and was monthly controlled from the clinical and laboratory point of view^[4].

Clinical suspicion based on systemic involvement is a key point when radiological or clinical findings are suggestive. But patients without systemic disease can have both a delayed diagnosis and treatment, with a poor outcome. Consequently, we promote to consider this entity in the differential diagnosis since early identification has a favorable outcome with surgical and/or clinical treatment.

Paracoccidioidomycosis should be considered in the differential diagnosis in-patients who have oral lesions with or without pulmonary involvement and have either lived in or traveled through endemic areas. Systematic research of Paracoccidioidomycosis would lead to an early diagnosis and therefore, to better chances for a successful treatment. Early diagnosis and treatment with antifungal medications can achieve an excellent outcome with limited local sequelae.

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