Rev. Inst. Med. trop. S. Paulo
38(3):229-231, maio/junho, 1996

BRIEF COMMUNICATION

PARACOCCIDIOIDES LOBOI (FONSECA FILHO et ARÊA LEÃO, 1940) ALMEIDA et LACAZ, 1948-1949. DESCRIPTION OF THE FUNGUS IN LATIN

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KEYWORDS: *Paracoccidioides loboi; Lobo's disease.*

The binomial *Loboa loboi* is actually a *nomen nudum* and illegitimate since the fungus was first described by CIFERRI et al. (1956)[4]. These authors studied a typical strain of *Paracoccidioides brasiliensis*, number 525 in the Fungal Culture collection of Instituto de Medicina Tropical de São Paulo which we sent them for study. The drawings on pages 20 and 21 of the publication by CIFERRI et al. (1956)[4] provide unquestionable evidence that this is a typical strain of *P. brasiliensis* (cultured in blood agar at 37°C and in the yeastlike phase). Since the journal where the mentioned article was published is not of easy access (it is an isolated publication of the ancient Institute of Mycology of Recife, State of Pernambuco, Brazil) most mycologists had no opportunity to examine the study in detail, with the consequent occurrence of confusing nomenclature. FONSECA & LACAZ (1971)[5] have already called the attention of mycologists to this mistake and the binomial *P. loboi* has been considered valid for the agent of Lobo's disease.

The genus *Paracoccidioides* was first described by ALMEIDA (1930)[1] followed by the species *brasiliensis*. ALMEIDA & LACAZ later described the species *loboi* in the same genus (1948-1949)[2] and a "neotypus" from a histological section from patient J.P.S. was sent in duplicate to nine herbaria as suggested by LANJOUW & STAFLEU (1964)[9].

Probably, as long as the sexual phase of the agents of paracoccidioidomycosis and Lobo's disease remain unknown these fungi imperfecti must be assigned to a complex or group of "entities" representing the same genus.

Today, with new information about *P. loboi*, we are able to state that the agents of the two diseases belong to an identical genus, as explained below.

1. Electron microscopy studies do not demonstrate special distinctions between *P. brasiliensis* and *P. loboi* at the level of cell elements but confirm their separation in terms of the reproductive process (FURTADO et al., 1967)[6].

2. The cell wall of the two fungi forms complexes with some polysaccharides and oligosaccharides, suggesting a similar chemical structure (MENDES et al., 1984)[10].

3. Antigens shared by *P. loboi* and *P. brasiliensis* may be detected using a rabbit serum against a metabolic antigen from *P. brasiliensis* by the peroxidase – antiperoxidase (PAP) technique (LANDMAN et al., 1988)[8].

4. Immunofluorescence tests show that *P. loboi* is antigenically related to the yeast form of *P. brasiliensis* (SILVA et al., 1968)[13].

5. Another argument in favor of the differences between *P. brasiliensis* and *P. loboi* was the demonstration by GOIHMAN-YAHR et al. (1989)[7] that neutrophils present no defect in the digestion of *P. loboi* in contrast to what occurs with *P. brasiliensis*.

6. The complement-fixing antibody is able to react with the polysaccharide antigen of *P. brasiliensis*, showing an expressive titer in some sera from patients with Lobo's disease.

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7. Sera from patients with Lobo's disease recognize the antigen gp43 of *P. brasiliensis* in ELISA (PUCCIA & TRAVASSOS, 1991)[11].

8. In extracts from skin lesions of patients with Lobo's disease, VIDAL et al.[14], detected the gp43 antigen of *P. brasiliensis* by SDS-PAGE and Western-blot.

9. In cutaneous lesions of Lobo's disease, SANDOVAL et al. (1996)[12] have demonstrated *P. brasiliensis* antigens using sera anti-*P. brasiliensis* exo-antigen and anti-gp43.

10. Finally the most significant aspect regarding the difference between the two species is that the etiologic agent of Lobo's disease has not yet been cultured. The experimental disease is not easily reproducible in a systematic manner. Only small nodules were demonstrated in cold-blooded animals or in golden hamsters[5]. In the parasitic phase there are many predominantly spherical, elliptical to oval chained elements measuring 6.0-13.5 x 5.0–11.0 µm – with a thick cell wall (1 µm or more).

Reproduction occurs by simple gemulation without exosporulation. Rosary figures are frequent.

CARMICHAEL (1962)[3] agrees with my point of view. To support validity of *P. loboi* I shall describe this species in Latin according to the rules of fungal nomenclature. Concerning the disease caused by *P. loboi*, ALMEIDA et LACAZ (1948-1949)[2] reported that the correct form is Lobo's disease and not lobomycosis or lobomicosis (Spanish language). In Portuguese "lobo" is the name of a savage animal (wolf in English).

DESCRIPTION OF THE FUNGUS IN LATIN

Paracoccidioides loboi (Fonseca Filho et Arêa Leão, 1940) Almeida et Lacaz, 1948-1949.

Cellulae globosae et subglobosae, pariete duplicis circuitus praeditae, 6,0–13,5 x 5,0-11,0 µm mensuratae; gemmatione simplici propagantur, exosporatione absente. Sunt etiam formae catenulatae, 3-6 cellulis, quarum plures connexae tallo vel tubo eas inter se communicante, structuras rosariformes componentes. Microscopia optica communia et microscopia electronica multas in texturis cellulas mortuas detegunt. Fungus adhuc sine cultura. Laesiones experimenti causa in *Dasipus novemcinctus*, in *Cricetus auratus* et in animalibus frigido sanguine, cum locatis processbus. Morbus spontaneus in delphinis. Cellularis paries *P. loboi* et *P. brasiliensis* complexus efficit cum quibusdam polysaccharideis et oligosaccharideis, similem structuram chymicam suggerens. Per reactiones immunofluorescentes *P. loboi* cum forme leveduriformi *P. brasiliensis* conjunctus est. Neutrophili sanguinis peripherici illius qui morbo Jorge Lobo laborat bene formas leveduriformes *P. brasiliensis* diferunt, contra quod in paracoccidioidomicose accidit. Antigeni communes, ut gp43 et alii inter eos qui *P. loboi* et *P. brasiliensis* nuncupantur, detegi possunt. Sera aegrotorum morbo Jorge Lobo antigenum gp43 per reactinonem ELISA agnoscunt. Reactio fixationis complementi antigeno polysaccharideo *P. brasiliensis* se praebee positivam seris aegrotorum morbo Jorge Lobo potest. Neotypus segmenti histologici ad morbum Jorge Lobo pertinens, ex aegroto J.P.S. sumptus, ad novem herbaria, ut monuerunt Lanjouw & Stafleu (1964), missus est. Fungus agens morbi Jorge Lobo, non lobomycosis vel lobomicosis. In lingua lusitana, "lobo" nomem animalis cuiusdam feri significat (wolf in anglica lingua).

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Recebido para publicação em 09/04/1996
Aceito para publicação em 02/07/1996