Chromoblastomycosis: an exuberant case*

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Abstract: Chromoblastomycosis is a chronic subcutaneous mycotic infection caused by dematiaceous saprophytic moulds. The most frequently isolated agent is Fonsecae pedrosoi. This article reports a case of a man from the Amazon region in Northern Brazil who presented with a lesion of 12 months' duration, which gradually increased in size until covering the majority of his right leg. A successful treatment with itraconazole was performed.
Keywords: Chromoblastomycosis; Dermatomycoses; Fibrosis; Fungal structures

A 45-year-old male farmer from the state of Amazonas, Northern Brazil, reported the onset of a lesion on his left leg one year ago, which had an indolent growth until affecting his entire left leg (Figure 1). The diagnosis of chromoblastomycosis was confirmed by mycological and histopathological studies (Figures 2 and 3). Clinical and laboratory tests (complete blood count, glycemia, anti-HIV, and urine) were normal or negative. The patient has been using itraconazole 400mg/day and improved greatly after 15 days (Figure 4) Chromoblastomycosis is a chronic subcutaneous infection caused by dematiaceous saprophytic moulds. Clinical manifestations are polymorphic and, in severe and long-lasting cases, different lesions may be identified in the same patient: nodules, tumors, plaques, warts, and scars.[1] In the case presented herein, verrucous plaques **accompanied by** ulcers with angulated borders and geometric shape suggest that the patient had a major role in the extensive disease involvement by scratching the lesion, along with lymphatic dissemination. The remarkable fibrotic process, which was previously considered a defense mechanism against chromoblastomycosis agents,

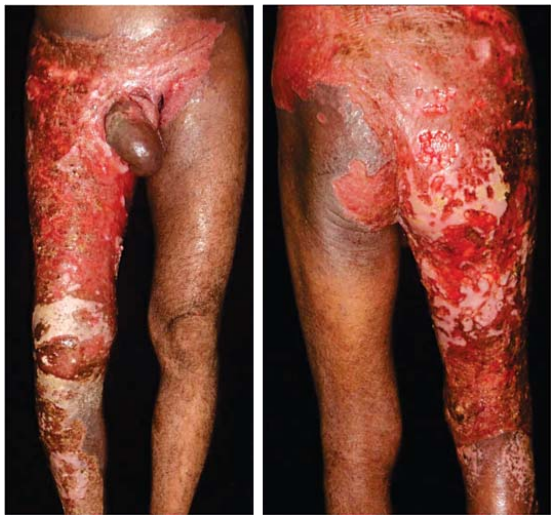

Figure 1: Extensive and polymorphic lesion: ulcers, verrucous plaques with dark stippled lines and fibrotic areas that caused even severe penile lymphedema.

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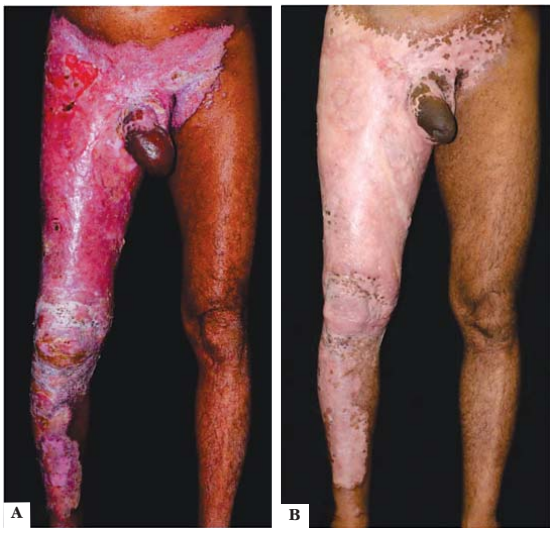

Figure 2: (A) Dramatic response after using itraconazole 400mg/day for 15 days; **(B)** Response maintained after 5 months of continuous use of the drug. Focuses of active areas were detected, interspersed with extensive cicatricial fibrous tissue

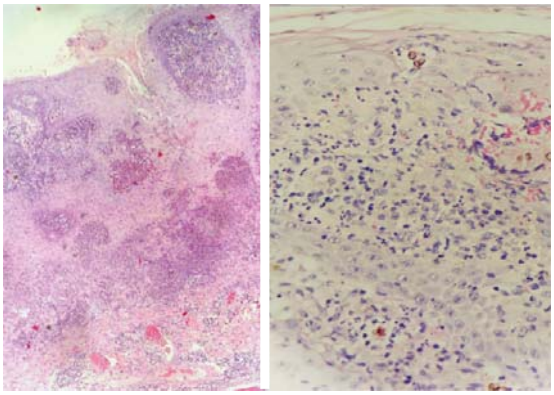

Figure 3: Histophatological examination: pseudoepitheliomatous hyperplasia, dense mixed inflammatory infiltrate and presence of round, brownish, anucleate structures named fumagoid bodies

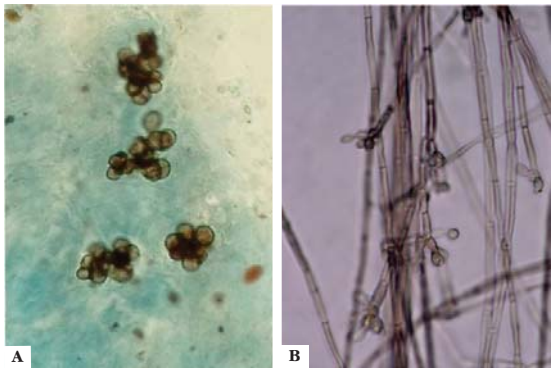

Figure 4: Mycological study: direct examination (a) and microculture chatacterizing *Fonsecae pedrosoi*

may result from the production of high levels of pyridinoline by the mould, which induces cross-linking in tissue collagen fibrils.[2,3,4] Therefore, these fibrils are resistant to interstitial collagenase, due to their restricted access to catalytic sites.[5] Fibrosis, when occurring concomitantly to a chronic inflammatory infiltrate and to a common secondary infection, impairs lymphatic flow. Finally, anarchical tissue circulation leads to atrophy of skin and soft tissues, causing deformities and disabilities, such as in the case reported herein.[4] This condition is characterized by a higher growth in extension than in depth. However, such extensive lesions such as those observed in the present case are uncommon.[6-9] ❑

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