



## Cutaneous and pulmonary paracoccidioidomycosis in a patient with a malignant visceral tumor \*

Paracoccidioidomicose cutânea disseminada e pulmonar em paciente portador de neoplasia maligna visceral

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**Abstract:** Paracoccidioidomycosis is a systemic mycosis caused by the fungus *Paracoccidioides brasiliensis* that is characterized by polymorphous clinical manifestations principally affecting the skin, mucous membranes, lungs, lymph nodes, adrenal glands and the central nervous system. Depending on the site of inoculation and the individual's immunological status, the disease may take various different forms, affecting the skin, lymph nodes, viscera or a combination of these. The present report describes a patient with extensive cutaneous and pulmonary paracoccidioidomycosis, with disseminated papules and pustules, fever and pulmonary symptoms, probably related to immunosuppression caused by a renal carcinoma.

**Keywords:** Carcinoma; Immunocompromised host; Kidney neoplasms; Paracoccidioidomycosis

**Resumo:** Paracoccidioidomicose é doença causada pelo fungo *Paracoccidioides brasiliensis*, caracterizada por quadro polimórfico e acometimento preferencial de pele, mucosas, pulmões, linfonodos, adrenais e sistema nervoso. De acordo com o local de inoculação e o estado imunológico do indivíduo, ocorrem as diversas formas da doença: tegumentar, linfonodular, visceral e mista. Relatamos caso de paciente com quadro de paracoccidioidomicose mista (tegumentar e pulmonar), com lesões cutâneas caracterizadas por pápulas e pústulas disseminadas e sintomas sistêmicos, possivelmente associada a imunosupressão causada por neoplasia maligna visceral.

**Palavras-chave:** Carcinoma; Hospedeiro imunocomprometido; Neoplasias renais; Paracoccidioidomicose

A 68-year old man presented with acute fever, a dry cough and disseminated papules and pustules (Figures 1 and 2). **Direct examination of the skin lesion:** round-shaped, multi-budding, birefringent walled yeasts. **Histopathology of the skin:** Suppurative granuloma, round-shaped structures compatible with *Paracoccidioides sp* (Figures 3 and 4). Positive serology (1:4 dilution) for *Paracoccidioides* (immunodiffusion – antigen gp43). **Chest x-ray:** Perihilar infiltrates. **Computed tomography of the abdomen:** Image suggestive of renal carcinoma. Treatment was initiated with itraconazole 400 mg/day and both the patient's general state of health and his skin lesions improved. Resection of the renal carcinoma was performed (multilocular cystic



FIGURE 1: Erythematous papules and pustules on the patient's back

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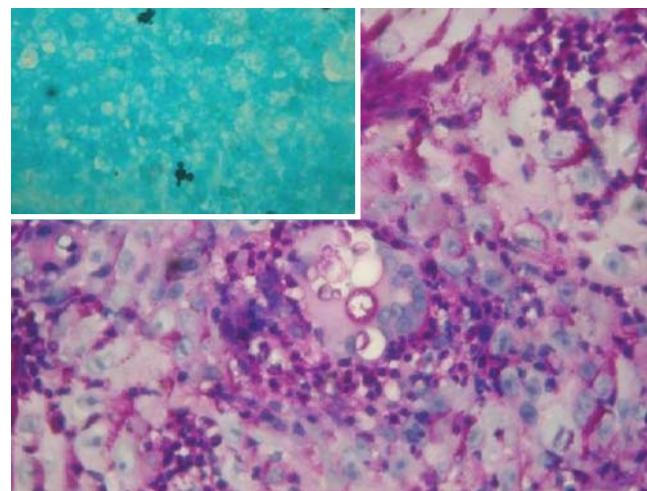
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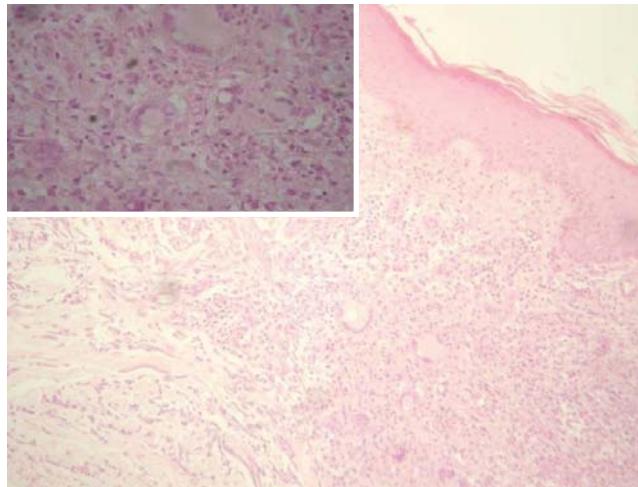
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**FIGURE 2:** Papules and pustules on the lower limbs



**FIGURE 4:** PAS staining showing prominent fungal cells within a macrophage (400x). Detail showing fungal cell budding in a Grocott stained section



**FIGURE 3:** Histopathology of a skin lesion: inflammatory infiltrate with suppurative granuloma in the dermis (HE, 100x magnification). Detail showing the presence of foreign body giant cells

renal cell carcinoma, a variant of clear cell renal cell carcinoma). This exuberant and atypical manifestation that resulted in the inclusion of numerous differential diagnoses emphasizes the importance of direct examination, a simple and inexpensive tool, for confirmation of diagnosis. The clinical behavior of this deep mycosis as an opportunistic disease should also be emphasized, this finding also being present in patients who are immunocompromised due to other causes such as organ transplantation or human immunodeficiency virus (HIV) infection.<sup>1-6</sup>

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