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CUTANEOUS PARACOCCIDIOIDOMYCOSIS: UNRAVELING A CHRONIC MULTIFOCAL FORM

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ABSTRACT

Paracoccidioidomycosis is a systemic fungal disease caused by *Paracoccidioidesbrasiliensis*. It is the most prevalent systemic mycosis in Brazil and is found predominantly in males between the 4th and 6th decades of life.Due to the involvement of multiple organs and the severe sequel potential, paracoccidioidomycosis is still a public health problem and, therefore, is a disease of great importance to the dermatologist.Given the above, we report a case of cutaneous paracoccidioidomycosis, with the subsequent discovery of pulmonary involvement and associated adrenal glands.

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INTRODUCTION

Paracoccidioidomycosis is an endemic systemic fungal disease caused by fungi of the genus *Paracoccidioides*; whose main known species is *Paracoccidioidesbrasiliensis*. Common in South America, paracoccidioidomycosis is the most common systemic mycosis in Brazil. It has a higher incidence in males and is the peak between the 4th and 6th decades of life (Marques, 2013 and Marques, 1998). A minority of patients (<5%) will develop clinical disease (Marques, 2013). And when the chronic form, which represents reactivation of the primary infection, is the most common (Marques, 2013; Marques, 1998 and Dias, 2015). The multifocal chronic form is often represented by the set of cutaneous mucous lesions and pulmonary involvement (Marques, 2013 and Marques, 1998), However, we report a case of chronic multifocal paracoccidioidomycosis with cutaneous, pulmonary and adrenal gland involvement.

Case Report: A 47-year-old male patient from Campo Grande (MS), previously healthy, reported painful and itchy ulcer in his right knee after a bicycle fall 15 months ago, associated with unchecked fever, occasional vomiting episode and weight loss of 4 Kg in the period. Dermatological examination revealed a verrucous circular plaque with a diameter of 6 cm, well-infiltrated and well-delimited edges, an erythematous atrophic scar in the center, and a yellowish-colored halo with hematic points located in the right knee (Figure 1). There was still Swollen Cervical Lymph Nodes on the left.

Figure 1. Circular plate in the right knee. Presence of scar-like tissue in the center

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Dermatological examination of the cutaneous lesion of the right knee ulcer border revealed a stratified paved epithelium with hyperplasia, presence of multinucleated giant cells containing fungal elements consistent with *Paracoccidioidesbrasiliensis* (Figure 2).

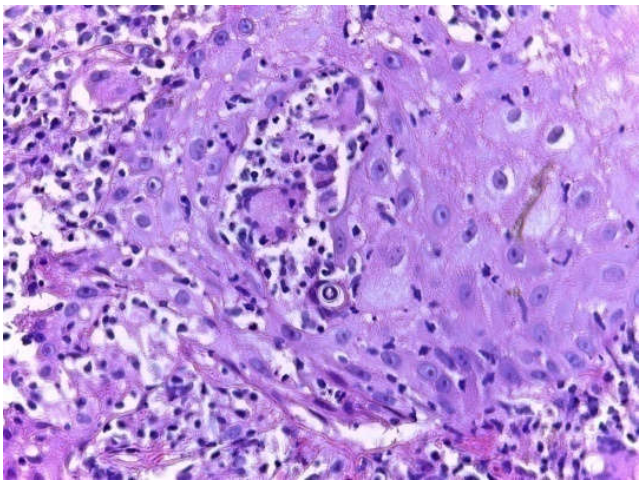

Figure 2. Pathological showing the birefringent fungal structure

After the diagnosis of paracoccidioidomycosis cutaneous, we investigated a systemic involvement of the condition. Laboratory tests showed normal blood count, low cortisol (2.80 mcg/dl), and normal adrenocorticotropic hormone. Chest tomography showed a ground-glass pattern (Figure 3), and abdomen tomography revealed enlargement of bilateral adrenal glands (Figure 4), characterizing a picture of chronic multifocal paracoccidioidomycosis with cutaneous, pulmonary, and the adrenal gland involvement.

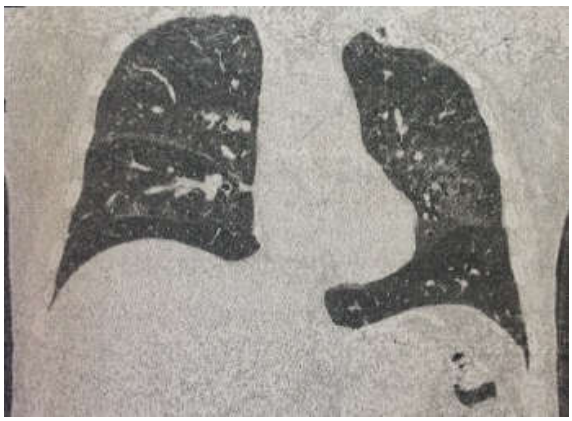

Figure 3. Chest tomography showing a ground-glass pattern

Figure 4. Abdominal tomography revealed enlargement of bilateral adrenal glands

Therefore, we chose treatment with itraconazole 200 mg per day. The Patient in the tenth month of treatment presented a satisfactory evolution of the condition.

DISCUSSION

Paracoccidioidomycosis is the most prevalent systemic fungal infection in Brazil (Marques, 2013). It has a polymorphic clinical presentation, whose manifestations are restricted to the skin and mucous membranes or associated with systemic involvement of multiple organs, especially lungs and adrenals (Marques, 2013 and Marques, 1998). Patients are usually young, may have Swollen Cervical Lymph Nodes, but the general condition is good, and the demand for medical attention is due to cutaneous lesions. We can subdivide the Paracoccidioidomycosis disease into two forms: the acute or subacute form (juvenile) and the chronic form (adult) (Marques, 2013; Marques, 1998 and Dias, 2015). The chronic form affects individuals from the fourth decade of life onwards; Progresses insidiously, and manifests itself in a unifocal or multifocal, with skin-mucous, lungs, and adrenals being the most affected sites (Marques, 2013). The case presented fits within this profile, described as chronic (adult) form.

Skin lesions present the pattern of ulcerated, ulcerovegetant or vegetating lesions, and the most frequent locations are the face, upper, lower limbs, and trunk. They are usually clean, without secondary infection, and often have fine granulation with hemorrhagic dots (Marques, 2013 and Dias, 2015). Pulmonary lesions are usually accompanied by complaints such as cough, dyspnea, and weight loss. The most observed patterns of radiological alterations are interstitial, micronodular, reticulonodular, nodular; and even pneumonic condensations (Dias, 2015 and Gomes, 2008). It is also important to emphasize the severity of pulmonary impairment, as commonly post-treatment fibrosis progresses to chronic obstructive disease (Gomes, 2008).

A routine investigation of the adrenal glands is also essential. In relevant research, by measuring cortisol and plasma aldosterone, under basal conditions and after stimulation with synthetic ACTH, they observed mainly subclinical impairment of hypofunctional adrenal glands in 53% of patients (Dias, 2015). The diagnostic confirmation aims to find the fungus in the tissue, either by direct mycological, histopathological, cytopathological, cytological after puncture-biopsy or culture. As well as the investigation of the main target organs of the disease is necessary (Marques, 2013; Marques, 1998 and Dias, 2015). The therapeutic approach is still based on classic drugs such as itraconazole and the sulfamethoxazole-trimethoprim combination for mild to moderate forms and amphotericin B deoxycholate for severe forms (Marques, 2013). In addition to classic drugs, second-generation azoles, such as voriconazole, should be considered, whose studies show an excellent therapeutic response (Dias, 2015). Paracoccidioidomycosis is a disease with a multidisciplinary approach due to the multiple organs involved. It is considered a public health problem due to its high potential to generate disabling sequelae, even death (Marques, 2013 and Dias, 2015). The reported case shows us that, because of the diagnosis of cutaneous paracoccidioidomycosis, should always be investigated a systemic involvement.

REFERENCES

Dias PC, Leri R, Marques SA, Marques ME, Stolf HO. 2015. Paracoccidioidomicose cutânea: reveladora de doença sistêmica. Diagn Tratamento. Vol. 20, n.2, p.53-5.

Gomes E, Wingeter MA, Svidzinski TI. 2008. Dissociação clínico-radiológica nas manifestações pulmonares da paracoccidioidomicose. *Rev Soc Bras Med Trop.* Vol.41, n.5, p.454-458.

Marques SA. 1998. Paracoccidioidomicose. An Bras Dermatol. Vol 73, n.5, p.455-69.

Marques SA. 2013. Paracoccidioidomicose: atualização epidemiológica, clínica, diagnóstica e terapêutica. An Bras Dermatol. Vol 88, n.5, p.701-12.

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