

Images in Clinical Tropical Medicine

Cutaneous Disseminated Paracoccidioidomycosis

Stanley Almeida Araújo,* Bernardo Magalhães Espindola, and Enio Roberto Pietra Pedroso

Program of Infectious Diseases and Tropical Medicine, Faculty of Medicine, Federal University of Minas Gerais, Minas Gerais, Brazil;
Department of Internal Medicine, Faculty of Medicine, Federal University of Minas Gerais, Minas Gerais, Brazil

A 46-year-old male farmer born in Minas Gerais State, Brazil, presented with disseminated plaque-like, ulcerated skin lesions (Figure 1A–D). Laryngoscopy showed lesions on the pharyngeal, nasal, and laryngeal mucosa (Figure 1E). He was a heavy tobacco smoker and drank 1–2 L of rum daily.

The differential diagnosis included secondary syphilis, sporotrichosis, histoplasmosis, tuberculosis, chromomycosis, and leishmaniasis. The following serologies were negative: venereal disease research laboratory (VDRL), Chagas disease, hepatitis B surface antigen, hepatitis C antibodies, and human immunodeficiency virus (HIV). Biopsy showed granulomatous inflammation, and yeasts with birefringent walls and multiple buds with a rudder's wheel aspect, characteristic of paracoccidioidomycosis (PCM), were seen (Figure 2A and B). Enzyme-linked immunosorbent assay (ELISA) for rPb27 and rPb40 (highly specific for *Paracoccidioides brasiliensis*) was strongly positive.¹

Treatment with itraconazole (200 mg/day) resulted in generalized swelling, necessitating cessation. Cetoconazole (200 mg/day) was started and used for 3 months without improvement.



FIGURE 1. Disseminated plaque-like, ulcerated skin lesions. It was presented in: **A**, the face, forehead, nasal and oral mucosa; **B**, abdomen; **C**, genital area and fingers; **D**, right leg; **E**, laryngoscopy showing granulomatous lesion in the laryngeal mucosa..

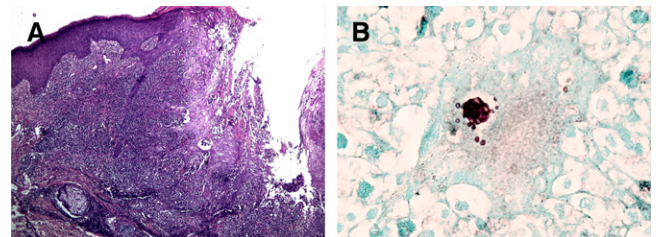


FIGURE 2. Histopathological analysis of a skin biopsy. **A**, Chronic ulcerative and granulomatous lesion of the skin (H&E stain 200 \times). **B**, Yeast spores with birefringent walls and multiple sporulation in the interior of a granuloma (Grocott stain 400 \times).

Sulfamethoxazole-trimethoprim (800/160 mg two times per day) was added, and 60 days later, there was substantial improvement of the skin lesions; laryngeal lesions resolved after 6 months.

PCM is the most prevalent deep mycosis in Latin America, and it is caused by dimorphic fungus *Paracoccidioides brasiliensis*.² It has different anatomoclinical forms (acute/subacute or chronic/multifocal), and it may affect any organ or system. The mucocutaneous involvement, seen in the present case, is most common in the chronic form of the disease. Prolonged treatment is necessary to control the mycosis, and use of traditional antibiotics such as sulfamethoxazole-trimethoprim is very effective.

Received June 1, 2011. Accepted for publication June 20, 2011.

Authors' addresses: Stanley Almeida Araújo and Enio Roberto Pietra Pedroso, Program of Infectious Diseases and Tropical Medicine, Faculty of Medicine, Federal University of Minas Gerais, Minas Gerais, Brazil, E-mails: stanleyaa@gmail.com and enio@medicina.ufmg.br. Bernardo Magalhães Espindola, Department of Internal Medicine, Faculty of Medicine, Federal University of Minas Gerais, Minas Gerais, Brazil, E-mail: bernardome@hotmail.com.

REFERENCES

1. Fernandes VC, Coitinho JB, Veloso JM, Araújo SA, Pedroso EP, Goes AM, 2011. Combined use of *Paracoccidioides brasiliensis* recombinant rPb27 and rPb40 antigens in an enzyme-linked immunosorbent assay for immunodiagnosis of paracoccidioidomycosis. *J Immunol Methods* 367: 78–84.
2. Martinez R, 2010. Paracoccidioidomycosis: the dimension of the problem of a neglected disease. *Rev Soc Bras Med Trop* 43: 480.

* Address correspondence to Stanley Almeida Araújo, Rua Carangola n 82, apto 604, 30330-240 Belo Horizonte, Minas Gerais, Brazil. E-mail: stanleyaa@gmail.com