LUMEN ET VIRTUS

Disseminated paracoccidioidomycosis: A case report

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ABSTRACT

Objective: To report a case of paracoccidioidomycosis (PCM), a systemic disease caused by fungi of the species Paracoccidioides brasiliensis and Paracoccidioides lutzii, in a previously healthy patient. Case description: A 21-year-old patient presented with diffuse lymph node enlargement, persistent fever, and significant weight loss with a 2-year evolution. He was diagnosed with PCM by means of cervical lymph node biopsy and treatment of the disease with liposomal amphotericin B was initiated. Conclusion: PCM is a rare disease that is difficult to diagnose, given the broad clinical picture of the disease. However, it has a good prognosis after diagnosis and appropriate treatment.

Keywords: Paracoccidioidomycosis, Disseminated, Fungus, Amphotericin B.

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INTRODUCTION

Paracoccidioidomycosis (PCM) is a systemic disease caused by fungi of the species *Paracoccidioides brasiliensis* and *Paracoccidioides lutzii.* These fungi are dispersed in the soil and when inhaled by the host, they transform into the yeast-like form, parasitizing the host's tissues. Thus, the main risk factor is contact with soil contaminated by the fungus. Its diagnosis can be made by serological tests and research on the fungus. Treatment is mainly with systemic antifungals.

OBJECTIVES

To report a case of disseminated PCM in a young, previously healthy individual.

CASE REPORT

P. C. M., 21 years old, male, from Firminópolis-GO, previously healthy and with a history of gardening. The patient developed diffuse lymph node enlargement, asthenia, persistent fever and significant weight loss, which had evolved for 2 years. A cervical ultrasound and a neck CT scan showed reactive lymph node enlargement, a chest CT scan that showed bilateral axillary lymph node enlargement, and an abdominal tomography showing multiple sparse lymph nodes in the abdominal cavity. In addition, sputum smear microscopy and PCR for tuberculosis were performed, both of which were negative. In view of these tests, a cervical lymph node biopsy was performed, which showed a granulomatous inflammatory process with caseous necrosis and multinucleated giant cells, with the presence of colorable fungi, suggestive of PCM. With this result, the patient was referred to the infectious diseases outpatient clinic of the Hospital for Tropical Diseases - HDT. He was in regular general condition, emaciated, with intense and diffuse lymph node enlargement and anemic. Therefore, he was hospitalized for transfusion of a packed red blood cell. On admission, the clinical picture already described persisted and evolved with intense splenomegaly and worsening of the general condition. He was diagnosed with disseminated PCM and treatment with liposomal amphotericin B was initiated.

DISCUSSION

The disease can manifest in acute, chronic and residual clinical forms. The acute form predominates in children, adolescents and young adults. Its evolution is rapid, with the fungus spreading to different organs. Systemic manifestations such as fever and weight loss, hepatosplenomegaly, digestive manifestations, skin and mucosal lesions, osteoarticular alterations, and pulmonary involvement occur. In the chronic form, the evolution is more protracted, and can last from months to years. It mainly affects adults and can be classified as mild, moderate and severe, which helps in the definition of the therapeutic plan. The residual form, on the other hand, is the result of the healing process after the treatment of the disease. Due to the broad symptomatology,

they have a differential diagnosis mainly with lymphoma, histoplasmosis and tuberculosis. The gold standard for diagnosing the disease is the search for fungi in fresh examination or biopsy fragment of possibly affected organs. Its treatment can be done with azole derivatives, sulfamides, and amphotericin B. Of these, the most used in practice are itraconazole, co-trimoxazole, and amphotericin B.

CONCLUSION

PCM is a rare disease, more common in endemic regions, which is related to the management of soil contaminated with the fungus. The clinical picture is broad, with systemic and multi-organ involvement, which makes it difficult to make a definitive diagnosis of the disease. The treatment of the disease is effective, so the prognosis is good after the start of the therapeutic plan.

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