

TITLE: EPIDEMIOLOGICAL SURVEY ON PARACOCCIDIOIDOMYCOSIS IN GUARAPUAVA, PARANÁ, BRAZIL

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ABSTRACT:

Paracoccidioidomycosis (PCM) is a systemic mycosis caused by the thermomorph fungi *Paracoccidioides brasiliensis* and *P. lutzii*. The disease affects mostly men over 40 years old, linked to agricultural jobs. PCM is restricted to Latin America and the south of Brazil is considered an endemic region. As few Brazilian states have mandatory notification of PCM, it is hard to know accurately the situation of the disease in the country. Therefore, current research aimed to evaluate the cases of PCM disease in an inland city of Paraná state, south of Brazil. The chosen city was Guarapuava, located in the south-central region of the state, with approximately 170.000 inhabitants, of which 14.000 live in the rural area. With a moderate, subtropical and humid climate, its winters presents frost and snow, with average annual temperature of 16.8 °C (average maximum of 36 and minimum of 6.8 °C). Its economy is based mostly on agriculture and timber industry. Data was collected from the charts of patients treated at the Municipal Ambulatory of Pneumology and Sanitary Dermatology (AMPDS – Ambulatório Municipal de Pneumologia e Dermatologia Sanitária), from 1990 until 2016. Of the 40 charts analyzed, 38 were confirmed as PCM, thus generating 1.5 cases/year, with the highest frequency in 2003 (10 cases) and 2007 (5 cases). Mostly men were affected (73.7%), leading to ratio of 2.8 men to every woman. Patients were 30 to 89 years old and mean age was 54 ± 13.8 years, with half of the patients between 50 and 69. The most common clinical manifestations were respiratory problems and skin lesions; therefore, 100% of patients had the chronic form of the disease. Every patient had at least one direct microscopic examination. Mean therapy duration was 16 months until patients were released from treatment. Co-morbidities were low: 3 cases of tuberculosis, 4 cases of leprosy, 1 case of leishmaniasis and no patient with PCM/HIV/AIDS. Even though Guarapuava is a city of agricultural economy and located in a region endemic to PCM, the prevalence of the disease was low, but the general characteristics of the disease were similar to those published elsewhere. It is important to emphasize the need to standardize patients' records with sociodemographic information and about patient habits, which can aid in the diagnosis and follow-up of the patient, besides allowing more complete epidemiological researches in the future.

Keywords: Epidemiology; *Paracoccidioides brasiliensis*; *Paracoccidioides lutzii*; Systemic mycosis.