

Paracoccidioidomycosis in Argentina: an update of the epidemiological situation

Cattana ME^{1,2}, Sosa MA^{1,3}, Rojas FD¹, Fernández MS^{1,2}, Mussin JE¹, Giusiano G^{1,4} and the *Paracoccidioides* and Paracoccidioidomycosis Multicentric Study (PPMS)

PPMS: Tracogna F², Negroni R⁵, Arechavala A⁵, Santiso G⁵, Chacón Y⁶, Valdez R⁶, Guelfand L⁷, Lopez Moral L⁸, Cech N⁹, Dávalos F¹⁰, Afeltra J¹¹, Almará A¹², Sellares O¹³, Morand M¹⁴.

Inst de Medicina Regional-UNNE¹, Hosp Perrando², Lab Central de RyP Corrientes³, Hosp JP II⁴, Hosp Muñiz⁵, Hosp S del Milagro⁶, Hosp Fernández⁷, Hosp Argerich⁸, Hosp 4 de Junio⁹, Hosp San Bernardo¹⁰, Hosp Ramos Mejía¹¹, Hosp San Martín Paraná¹², Hosp Central Reconquista¹³, Lab Sanatorio Parque¹⁴. Argentina

Argentina has two endemic areas of paracoccidioidomycosis (PCM), one in the northwest (NOA) characterized by the high incidence of PCM juvenile type and the more extensive area in the northeast of the country (NEA), where the chronic clinical form is predominant.

In order to know the current status of the clinical and epidemiological characteristics of PCM in Argentina, a multicentric study of PCM coordinated by Departamento Micología, Instituto de Medicina Regional, Universidad Nacional del Nordeste (Argentina) was started.

We present a retrospective descriptive analysis of 103 Argentinian PCM cases registered from 2013 to May 2017, 88 from NEA and 15 from NOA. Proved PCM by microbiological diagnoses was obtained in 99 cases. In 4 cases, serologic test was the only diagnostic tool.

Average annual number of cases ranged 21 to 29, with 7 cases in 2017. The highest frequency of cases was reported in the northeast area, but 57% of cases occurred only in Chaco province.

In this study 46% of patients reported nor lived or worked never before in rural areas, this is interesting to note considering PCM was defined as a systemic fungal infection endemic in rural areas.

The mean age was 49 years old (range 13-89), responding to a significant predominance of chronic forms.

Corresponding with the epidemiological characteristics of both areas, PCM juvenile type was detected in 6 % of NEA patients, in contrast, this clinical form represented 26 % of NOA patients.

A lower male/female relationship (9:1) than reported by others countries was observed. The affected women were either postmenopausal or had a juvenile form of the disease. Risk factors like smoking or alcoholism were registered in 35% and 15% of cases, respectively. This is lower than other reports but could be due to under reporting. Using antigen from *P. brasiliensis* B339 strain, double immunodiffusion (ID) reaction in 88 patients were performed; 17% of them were non-reactive. This is probably due to focused lesions or immunocompromised patients or differences in the antigenic composition, probably related to phylogenetic peculiarities in *Paracoccidioides* isolates circulating in this area.

Keywords: paracoccidioidomycosis, Argentina, chronic form