

PARACOCCIDIOIDOMYCOSIS CLINICAL PRESENTATION, FOLLOW-UP AND OUTCOME IN 141 CHILDREN.

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Paracoccidioidomycosis (PCM) is a granulomatous disease caused by *Paracoccidioides brasiliensis*. PCM is the most important mycosis of Latin America, the endemic area being centered in Brazil, especially in the Southern and Southeastern regions.

The hospital records of 127 patients, who had a confirmed diagnosis of PCM, were prospectively collected over a 36-year-period (February, 1981- May, 2017). The following data were analyzed: age, gender, complaint, signs and symptoms, laboratory features: hemogram, serum protein electrophoresis, treatment regimen, complications and outcome. One hundred forty four episodes of PCM were diagnosed in 127 children (ages 2 y - 17 y, median = 104 month, mean = 102 month), with a male: female ratio of 1.5:1. In 27, 7% of the 141, patients showed moderate to severe malnutrition (grade II = 24.3% and grade III = 11.4%) upon admission. In all 141 episodes, diagnosis was confirmed by the identification of *Paracoccidioides brasiliensis* in lymph node biopsy (84%), skin biopsy (8, 5%), bone biopsy (7, 5%)

The complaints that prompted children to seek medical care and motivated their admission had lasted, on average, 60 days. The main clinical manifestations found at the moment of admission in 67, 4 patient was lymph node enlargement.

The mean values of hemoglobin, eosinophils, albumin and gammaglobulin at admission were respectively: 9,4 g/dL, 1240 mm³, 2,78 g/dL and 3,27 g/dl.

Different therapeutic regimens were employed to treat specifically the PCM: sulfametoxazole-trimethoprin was used as the sole drug in 114 episodes or associated to amphotericin B in 9, ketoconazole in 5 and the remaining thirteen were treated with other combinations.

Ninety two patients are being followed in the outpatient clinic; sixty seven have completed the treatment, while twenty five are still under treatment. Seven deaths occurred, all during the first month of treatment. Necropsy (performed in five patients), confirmed fungus' dissemination in all patients: lymph nodes, spleen, liver, bone marrow, bones and skin in all cases. No other infectious agent or associated complication was present, suggesting that death was likely caused by the fungal infection. The most frequent complications were: portal vein thrombosis, hypercalcemia and hypersplenism.

The diagnosis of juvenile PCM should always be considered in children presenting with a febrile lymphoproliferative syndrome, associated to anemia, hypergammaglobulinemia and eosinophilia. Early diagnosis and institution of appropriate treatment is essential to achieve adequate control of this disease. Empirical treatment should be considered in severe disseminated forms, while laboratory studies to confirm PCM are being conducted.

Keywords: paracoccidioidomycosis, children, anemia, eosinophils, sulfametoxazole-trimethoprin.