Antigenic Diversity in *Paracoccidioides brasiliensis* Activity

Assis, C. M. de[1]; Rodrigues, M. C.[2]

[1]Div. Serv. Básicos, Inst. Adolpho Lutz; [2]Dep. Patologia, Fac. Medicina, USP, São Paulo, Brasil. cmdeassis@yahoo.com.br

Paracoccidioidomycosis is a granulomatous disease endemic in Latin America. It is progressive, subacute to chronic. The etiologic agent of this mycosis is *Paracoccidioides brasiliensis* (Pb). It is a dimorphic fungus growing in a mycelial form at room temperature, and in tissue or enriched media at 36ºC in vitro, it produces yeastlike cells. Related studies on obtention of crude or purified antigens have been performed since 1916, with the purpose of serologic diagnosis. When crude antigens obtained from the diffent isolates without agitation were used relative lot-to-lot variation could be observed. Different isolates of the fungus have been used, such as the called strains 18, 113, 265 and 339 grown in Sabouraud, Fava Neto agar, Negroni modified and NGTA media. Cultures with or without agitation were used, with different times at 36ºC. Polissacharydic antigens obtained from cell wall have been used in Complement Fixation test. Culture filtrate antigens are widely used in precipitation methods as ID, IEF, CIE and Wb and immunoenzymatic method ELISA. Different antigenic levels were obtained with the use of polissacharydic and metabolic antigens. When only strain 113 was used, several glycoprotein bands varying from 19 to 105 kDa were observed, mainly by Western blotting. The more intense bands corresponded to proteins 28, 43, 54 and 78 kDa. The 43 kDa glycoprotein is the immunodominant antigen of Pb. Reproducibility of results with the only use of isolate Pb113 grown in Fava Neto agar medium, Negroni modified and NGTA media, with agitation was obtained. Fisiological adaptation, inocula concentration and viability of the cells were performed for this purpose.