

A PRELIMINAR PROTEOMIC STUDY OF THE MAIN ANTIGENIC FRACTION OF
Sporothrix schenckii

Bernardes-Engemann, A.R., Benvenuto, F., Araújo, S.G., Kubitschek-Barreira,
P.H., Loureiro y Penha, C.V. and Lopes-Bezerra, L.M.

Laboratório de Micologia Celular e Proteômica, Universidade do Estado do Rio de
Janeiro, Rio de Janeiro, Brasil.

We had previously identified a main antigenic fraction, SsCBF, on the cell wall of the dimorphic pathogenic fungus, *Sporothrix schenckii*. This complex fraction has been applied for the serodiagnosis of all clinical forms of sporotrichosis exhibiting a high sensitivity and specificity in an ELISA test. In the present work we studied the SsCBF fraction by 2-D electrophoresis in order to determine the protein profile of this antigen. As SsCBF is composed by a highly glycosylated component, as observed by 1-DGE, it resulted on a poor focusing. For this reason we have further purified the SsCBF fraction by TCA/Acetone precipitation (SsCBFppt). After this procedure we obtained an improvement on the resolution of the 2DE maps. In order to analyze if this procedure led to a loss of reactivity with patient's sera, we have performed a comparative ELISA assay with both preparations. There was no difference in the reactivity of either SsCBF or SsCBFppt with sera of patients with sporotrichosis. Furthermore, after TCA/Acetona precipitation the level of cross-reactivity with serum of patients with histoplasmosis and aspergillosis decreased. We are starting an immunoproteome study to seek for specific markers within SsCBFppt with a prospective diagnostic value.

Supported by Ministério da Saúde (DECIT), FAPERJ and CNPq.