

SIALOGLYCOCONJUGATES IN *MUCOR POLYMORPHOSPORUS*

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Zygomycosis is no longer an uncommon fungal infection since it is often fatal in severely immunosuppressed patients. Virulence attributes expressed by *Mucor* sp are not well defined. Microbial adherence is a prerequisite for colonization and essential step in establishment of infection. Elucidation of the primary structure of surface microbial glycoconjugates, especially of those that are already known as virulence determinants, is of great relevance to understand the microbial pathogenicity mechanisms. The external position of sialic acids on glycoproteins and gangliosides, either alone or in oligo or polymeric form, situated on the outer cell membrane, implies a strong influence in cell biology. Sialylation of microorganisms follows the strategy, of providing better changes of survival in the host organisms and thus enhancing virulence. Binding of FITC-lectins SNA and MAA to *M. polymorphosporus* cells was analyzed quantitatively by flow cytometry in conidial and yeast forms, while the mycelia were analyzed by fluorescence microscopy. Therefore, all fungal forms pre-treated with sialidase resulted in less intensive fluorescent reactions. The nature of sialic acid-carrying glycoproteins in mycelia was analyzed by Western Blotting showing the same pattern of binding with SNA and MAA lectins. The detection of sialic acids on the surface in distinct morphological stages of *M. polymorphosporus* may contribute to a better understanding of the host-fungus interaction.

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