Characterization of an ecto-5'-nucleotidase activity in *Candida parapsilosis*

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Candida parapsilosis is a fungus of medical importance and with wide distribution in the nature, being able to infect the skin and the gastrointestinal human tract. The more common clinical manifestation is the intravascular infection for *Candida parapsilosis*. During the infection, it is important for the fungus to recognize and to adhere on the host tissue. Therefore, these interactions must be mediated by specific host and fungus plasma membrane determinants. The aim of this work is to describe an ecto-5'-nucleotidase presented on the *C. parapsilosis* surface. This kind of enzyme is a plasmatic membrane anchored glycoprotein. It catalyzes nucleoside monophosphates hydrolysis, as AMP (adenosine monophosphate), releasing adenosine, an important anti-inflammatory agent that also participates in the nutrition of them. Simultaneously, this same adenosine can activate receptors in the host cells intervening with the establishment of the host immune response. In this work we identified the presence of an ecto-5'-nucleotidase activity on intact cells of *C. parapsilosis*. This activity is shown to have a linear increase with time and cellular density. The maximal activity was reached with acid pH, around 4.5. Mononucleotides, as 5'-UMP, 5'-IMP, 5'-GMP and 5' CMP are also hydrolyzed by the enzyme, which is modulated by $MgCl_2$. The enzyme is inhibited by ammonium molibdate, however sodium ortovanadato and sodium metavanadato did not affect the ecto-5'-nucleotidase activity. We are now evaluating the importance of this enzyme on fungus survival.