SCHISTOSOMA MANSONI: EFFECT OF PHOSPHODIESTERASE INHIBITOR DURING *IN VITRO* CULTIVATION OF MIRACIDIUM TO SPOROCYST.

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Schistosomiasis is one of the most prevalent parasitic diseases in human. The parasite, *S.mansoni*, has an evolutive cycle composed for periods of free life in aquatic environment and proliferative periods in invertebrate and vertebrate hosts. Recently, it was reported for the first time the existence of an ubiquitin–proteasome proteolytic pathway in this parasite. This pathway is ATP dependent and it is involved in the control of the intracellular protein level. The complex 26S proteasome is composed of a 20S catalytic core particle and two 19S regulatory particles. To date is well know that the drug phosphodiesterase inhibitor (IBMX) is related to increase levels of AMPc and reduction of ATP. In this study, we analyze, *in vitro*, the effect of the IBMX during the development of miracidium to sporocyst. Our data showed that IBMX induce a blockade on miracidium to mother sporocyst transformation. Taken together our data contributed for the understanding of the ubiquitin–proteasome proteolytic pathway on the development of this parasite.

Key words: IBMX, *S. mansoni*, proteasome
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