

Status of activation of mature T and B lymphocytes cultured with breast milk of *Schistosoma mansoni* infected mice

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The high prevalence of chronic schistosomiasis in pregnant or childbearing age women has been widely reported. Breastfeeding by schistosomiasis mothers can alter the long term immune response of their offspring. Here, it was undertaken an *in vitro* analysis of the breast milk from *Schistosoma mansoni* infected mothers. Mature splenocytes were cultivated with mitogen added to the Milk of Infected (MIM) or Non-Infected Mothers (MNIM) or this last plus egg antigen of parasites (MNIM+SEA). It was evaluated in T Lymphocytes (CD3+) and CD28, CD154 or CTLA-4; IL-10 by CD45R+ cells by flow cytometry. In comparison to mitogen MNIM and MIM modify the CD3+/CD28+ and CD3+/CTLA4+ cells frequency, respectively. MIM reduced the CD45R+/IL-10+ cells frequency. MNIM+SEA increased CD3+/CD154+ cells frequency. These findings emphasized the tolerogenic character of breast milk and highlighted the milk from infected-mothers as a stimulator of the B cells activation.

Key-Words: Schistosomiasis, Breast Milk, Soluble Egg Antigen.

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