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***Menthapiperita L.* improves liver fibrosis on experimental schistosomiasis**

Anibal FF, Dejanini NN, Souza LC, Oliveira SR, Neris DM, Rodolpho JM, Correia RO, Rodrigues V, Sacramento LV, Faccioli LH and Afonso A
University of São Paulo, Brazil

Schistosomiasis is a chronic disease caused by an intravascular trematode of the genus *Schistosoma*. Praziquantel (PZQ), the only drug recommended by the World Health Organization for the treatment and control of human schistosomiasis, is now facing the threat of drug resistance, indicating the urgent need for new effective compounds to treat this disease. In this work we investigated the immunomodulatory and antiparasitic effects of *Mentha piperita L.* (peppermint) on murine Schistosomiasis mansoni. Female Balb/c mice were infected each with *S. mansoni* cercariae and divided into three experimental groups: (I) untreated; (II) treated daily with *M. piperita L.* and (III) treated on 1/42/43 days post-infection with Praziquantel. Another group with uninfected and untreated mice was used as a control. Subsequently, seven weeks post-infection, *S. mansoni* eggs were counted in the feces and intestine. Worms were recovered by perfusion of the hepatic portal system and counted. Sera levels of IL-10, IL-13, IFN- γ were assayed by ELISA. Animals treated with a daily dose of *M. piperita L.* showed increased sera levels of IL-10, IFN- γ , IgG2a and IgE. Besides, *M. piperita L.* treatment promoted reduction in parasite burden by 35.2% and significant decrease in egg counts in the feces and intestine. Moreover, the treatment appears to involve liver modulation after the onset of granuloma inflammation, and prevent liver fibrosis.

Biography

Anibal FF had completed her PhD from University of São Paulo, Brazil in Basic and Applied Immunology. As Principal Investigator, Laboratory of Parasitology (Federal University of São Carlos) seeks new tools for the treatment, prevention and diagnostics for infectious diseases. Currently, they are working with two plants and six enzymes and their effects against schistosomiasis mansoni and toxocarasis, about the treatment of the infectious diseases, their group studies effects of plants (extracts) and their isolated fractions in order to evaluate the anti-parasitic and anti-inflammatory effects and for infectious disease prevention, moreover have been working on the evaluation of the proteins of the parasite that has been potential to induce immune responses that decrease the parasite burden.

feranibal@yahoo.com

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