Fernanda de Freitas Anibal et al., J Infec Dis Treat 2018, Volume 4
DOI: 10.21767/2472-1093-C1-002

Hepatic fibrosis in schistosomiasis, a new treatment

Fernanda de Freitas Anibal[1], Karina A. Feitosa[1], Ricardo de O. Correia[1], Vanderlei Rodrigues[2], Ana Afonso[1], Karina N. Z. P. Rossi[1] and **Lucimar R. S Avó[1]**
[1]Federal University of São Carlos, Brazil
[2]Faculty of Medicine of Ribeirão Preto, Brazil

Schistosomiasis is an important parasitic disease caused by Schistosoma mansoni, an intravascular trematode. Praziquantel (PZQ) is the only treatment for this. Thus, studies on new antischistosomal compounds are fundamental for disease control. In our model, Mentha piperita L. compounds – menthol and menthone (MM) – in association with acetylsalicylic acid (ASA) is demonstrated in the regulation of hepatic fibrosis caused by schistosomiasis granulomas. Six different groups of ice were infected with 80 cercariae (groups: infected and untreated, infected and MM treatment; infected and treatment MM with ASA, all treated during 14 daily after 35 day pos infection; and infected treated with Praziquantel (single dose). Parasitological, cytological and histological analyses were performed. The number of eosinophils in the peritoneal cavity lavage (LPC) significantly reduced in all treated groups. Groups treated with 30 mg/kg of MM presented a 62.80% reduction and groups treated with 50 mg/kg of MM + ASA presented a 64.21% in the number of eggs. In the liver´s histological analysis we observed that all MM treated groups expressed a unique cytological profile, with diffused cells around the granuloma. In the experimental group treated with 50 mg/kg of MM + ASA, it was possible to observe the formation of type III collagen fibers, a typical wound healing characteristic. Our data strongly suggests that both the hepatic fibrosis and the inflammatory process were regulated through the schistosomiasis granulomatous process after treatment with MM with ASA.

Biography

Fernanda de Freitas Anibal is a Associate Professor in Federal University of São Carlos and Principal Investigator at Laboratory of Inflammation and Infectious Diseases, Brazil. Currently, they are working with plants and enzymes and their effects againts schistosomiasis and leishmaniasis, about the treatment of infectious diseases. Their group studies effects of plants and their isolated fractions in order to evaluate the anti-parasitic and anti-inflammatory effects for infectious disease control. She has published more than 46 papers in scientific journals.

feranibal@yahoo.com

Notes: