353 - A CONTRIBUTION TO THE IMMUNOPATHOLOGY OF SCHISTOSOMAL PERIPORTAL PIPESTEM FIBROSIS.

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Objective: Patients infected with Schistosoma mansoni present two polar forms of schistosomiasis: the intestinal (80-95%) and the hepatosplenic (5-10%) forms. We studied the immunopathology of these forms represented in the murine model by two distinct hepatic pictures: a) isolated granulomas and b) periportal fibrosis.

Methods and Results: BALB/c mice submitted to single infection, at 41 weeks after infection, develop periportal (pipesstem) fibrosis in 26.5% of the cases, while, with repeated infections, that percentage increased to 90%. The counting of eggs in the liver and the collagen content determined with hydroxyproline revealed no significant differences between the two groups. The levels of IFN-γ, IL-4 and IL-5 in the spleen cell culture supernatant were quantified by ELISA. Cells were stimulated with concanavalin A or solubilized egg antigen (SEA). The IL-4 and IL-5 cytokine levels were higher in cultures of splenocytes from mice with pipesstem fibrosis after single infection when contrasted with those from reinfected mice. The proliferative response was more pronounced in mice with scattered granulomas. The specific antibody responses to SEA (IgG1, IgG2a, IgG2b and IgG3) did not differ among groups.

Conclusion: The results from these experiments do not show a clear pattern of immune responses to differentiate mice with isolated granulomas in their livers from those with schistosomal periportal (pipesstem) fibrosis.