Introduction and Aims

Introduction and Aim of the work

The major clinical manifestations of infection with the three principal species of human schistosomes are essentially related to obstruction to blood or urine flow due to inflammatory and fibrotic responses to product of the helminth **(Warren, 1973)**. The parasite factor responsible for disease is the egg; s large numbers of which are produced daily over periods of many years. Many of these become trapped in the tissues of the intestines, liver and urinary tract **(Bloch et al., 1972)**. The large vascular granulomas and the fibrosis, which succeeds them, are essential in the development of the pathophysiological changes **(Bloch et al., 1972)**. Investigations on the etiology of the *Schistosoma mansoni* egg granuloma have shown that the highly destructive lesions are essentially cell-mediated immunologic responses, initiated by cercariae living, dead adult worm and antigens secreted through ultramicroscopic pores in the egg shells **(Kenneth, 1977).**

Human Schistosomiasis mansoni and haematobium are chronic disease which present morbidity spectrum ranging from subclinical infections to severe hepatosplenic disease and urinary disease leads to carcinoma of urinary bladder and dysplastic changes in liver cells **(Cheever et al., 1993).**

Through chronic schistosome infection, the host is afforded continuing opportunities to respond immunological to a multiplicity of schistosome antigens. These responses are not static and any real understanding of the immune responses which occur during infection, and evaluation of their contribution of the status of the patients, depends upon attempts to define various immune parameters which interact during different stages and conditions of the infections **(Daniel et al., 1977).**

The aim of the present study is to clarify the exact nature of the pathological lesions induced by *Schistosoma mansoni* and *S. haematobium.* The liver and urinary bladder tissues were selected. The method of the study was extended to cast-shed through light on pathological status of those organs (liver and bladder) when the infections of mice by living cercariae are acute and chronic as well as the pathological changes when antigens of cercariae, egg and worm were used only and when used with living cercariae; in a trial to know how *Schistosoma mansoni* and *S. haematobium* initiate cellular changes that led to hyperplastic and dysplastic alteration of the target organs.