CHAPTER I

INTRODUCTION
INTRODUCTION

Immunologic response at times appears to be directed against host's own tissue and the axiom "Horror Autotoxicus" once enunciated by Ehrlich (1900) would seem no longer tenable. This is especially observed in some groups of conditions, the autoimmune diseases. Autoimmune disease has been defined in the monograph by Mackay and Burnet (1964), as "a condition in which structural or functional damage is produced by the action of immunologically competent cells or antibodies against normal components of the body". There is a state of break-down of the normal homeostatic mechanism which normally prevents the formation of auto-antibodies or the evolution of immunologically competent cells.

Presently, the auto-immune conditions which form the main bulk of the immunopathies attracted our attention with increasing interest. There are conditions, where auto-immune mechanism is well established and proved beyond doubts. On the other hand there are conditions which provide grounds for a thorough probe as to their basis of autoimmunity. This group includes also certain type of liver disease, which has since been variously named by different workers as Juvenile cirrhosis, lupoid hepatitis, active chronic hepatitis and plasma cell hepatitis, all ultimately terminating to cirrhotic condition in a protracted course. The series of biochemical,
immunoserological and histological changes, that are brought about and perpetuated in these conditions, provide a stimulating provocation for a planned experimental study. It is hardly rational indeed to adjudge autoimmunity to be the responsible operating mechanism, on the basis of varied clinical and laboratory findings alone.

Despite few earlier attempts by different investigators in this domain of hepatic immunopathy, there still remains considerable gap in our concept about the entity. Experimental production of hepatic lesion by liver homogenates had been quite varied in the hands of different investigators. There had not so far been simultaneous correlation of biochemical and immunoserological findings along with histological lesion thus produced experimentally. The role of Freund's adjuvant as compared with other immunological adjuvant in the production of immunologic lesion needs detail elucidation. And further, different fractions of liver homogenate should preferably be experimented separately in order to demarcate their individual specific role in the production of hepatic lesion in both homologous and heterologous hosts.

It would, therefore, be worth investigating the immunologic effects of different fractions of liver homogenate with immunological adjuvant on rodent hosts. This model experimental study in a planned manner, will not only throw light on the extent of immunologic response but also on any possible autoimmunity involved in the reaction. These findings
as a whole would thus provide ample scope to compare the same with those seen in human counterpart.

It is with these ideas in view, an experimental study was planned on rodent hosts. The elaborate findings and the inferred facts have been recorded in the thesis.