

INTRODUCTION AND AIM OF THE WORK

The Lymphocyte is the only cell in the body, shown to be intrinsically capable of specifically recognizing an antigen as foreign, and initiating mechanisms to get rid of the foreign invader.

Just as importantly, the lymphocyte can recognize the component of the host tissue as "self", and direct the vast resources of the immune system to remain still and unreactive. The recognition of an antigen by the lymphocyte triggers a series of events that lead to the destruction and/or removal of antigen. Initially the lymphocyte undergoes some striking morphologic alterations. Its size increases dramatically; a direct reflection of an increase in the cytoplasmic mass. The new cell is called an immunoblast or activated lymphocyte, that can carry out many immunologic effector functions, but further differentiation is required in order to achieve maximum and fully mature response (Thaler et al., 1977). The various

immunologic effector functions have been classified into two broad categories :

- I - Humoral Immunity which refers to the production of antibodies; glycoprotein molecules capable of binding the stimulating antigen. This is mediated by Lymphocytes called B Lymphocytes.
- II - Cell mediated Immunity which refers to a wide range of functions carried out directly by cells or products of these cells other than antibody molecule. This type of immunity is mediated by T Lymphocytes and their subsets.

In addition to the requirement for T and B cells in immune cooperation, accessory cells such as macrophages are necessary for activation of B cells and T cells (Katz and Benacref, 1975).

The immune system have been extensively studied, both humoral and cellular (New-Berr and Sanford, 1971).

Dialysis is usually carried out in

patients with chronic renal failure to tide them over a critical period before renal transplantation. Both types of immunological reactions are important for the success of transplantation, but cellular immunity plays the major role in graft stability or rejection. Usual the patient may be put for dialysis for varying period waiting for the suitable donor and therefore, the immune system is continuously in challenge with various antigens and chemicals.

In this work, we aim to study the behaviour of the immune system in patients with chronic renal failure on haemodialysis and peritoneal dialysis for varying periods, and to form an immunological profile for a patient with chronic failure on dialysis standing for renal transplantation.