Introduction

Immune tolerance means immunological unresponsiveness of an individual to an antigen from inside the body or foreign (i.e tolerance to exogenous antign as dietary proteins) ***(jenway 2002)***.

Oral tolerance is just as crucial for the survival of an individual as self tolerance. Immune tolerance is also important for fetal survival and normal reproduction -immune tolerance is an antigen specific and somatically acquired not inherited ***(Takeda et al., 2003)***.

Immune tolerance involves both innate immunity [Membrane complement regulatory proteins that protect self tissues from alternate pathway as well as natural killer cells] and adaptive immune system [T and B cells] ***(jenway 2002).***

Central T cell tolerance is mediated either by negative or positive selection -central B cell tolerance operates through BCR (B cell receptor) editing and B cell apoptosis. prepheral T cell tolerance occurs through three mechanisms namely clonal anergy apoptosis and immune regulation ***(Takeda et al., 2003)***.

Loss or break down of tolerance results in autoimmune diseases , allergy to proteins and reproductive immunological disorders. Immune tolerance may be physiological or may be induced experimentally e.g high dose of aqueous protein antigen (high dose tolerance)administered systemically ,protein antigen given oral (oral tolerance) and repeatitive doses of low concentration (low dose tolerance) ***(Hemmi et al., 2000)***.

Aim of the work

The aim of this work is to study the following:-

- The normal immune system.
- Physiological role of the immune tolerance.
- Implication of break down of immune tolerance in the pathogenesis of different diseases.
- Therapeutic approaches of disturbance of the immune tolerance.