INTRODUCTION AND AIM OF THE WORK

Introduction:

Abortion is the termination of pregnanay before fetus can survive outside the uterus **(Pelosi and Iffy, 1981).**

Causes of abortion include; structural chromosomal abnormalities, variety of infectious diseases, chronic wasting diseases, endocrine abnormalities, nutritional deficiencies, alcohol and tobacco, deformity of the uterus or cervix, physical and emotional trauma , and immunologic causes **(Pritchard et al., 1985).**

Poland et al., (1981) reported that about 15 % of all recognized pregnancies terminate in spontaneous abortions. The actual frequency of habitual abortion is being in the range of 0.4 - 0.8 % **(Stray-Pederson and Larentzen, 1979).**

Harger et al., (1983) found no recognized causes in 40 - 50 % of all studied patients with recurrent abortions. They suggested that these patients may have immunologic causes.

Immunologic factors have been proposed as unrecognized causes of recurrent abortion, these include : lack of serum blocking factors that prevent maternal recognition of paternal antigens **(Rocklin et al., 1976).** and an increased incidence of sharing of major HLA antigens between husband and wife **(Komlos et al., 1977) .**

Lauristen et al. (1976) found that there is hyporesponsiveness in maternal-paternal mixed lymphocyte culture within couples subjected to habitual abortion .

Aoki and Yogami (1983) noted increased D/DR antigen sharing in such couples. They suggested that HLA resemblance between spouses leads to maternal- fetal histo compatibility, which in turn may be the cause of early fetal loss. **Caudle et al., (1983)** found that the degree of HLA antigen sharing did not define a population with increased pregnancy loss or predict subsequent pregnancy outcome.

An IgG blocking factor was found to be present in the serum of women with normal pregnancies, but absent from women with repeated spontaneous abortion **(Scott , 1982).**

There is tendency for increased sharing of human lymphocyte antigens between husbands and wives with repetitive abortions, and this is most prominent at DR locus **(Thomas et al., 1983).**

Various diseases have been associated with antigens determined by HLA loci **(Schwartz, 1987).**

An increased incidence of HLA-A_2 and HLA-B_{12} haplotypes was noted for women with secondary habitual abortions **(Johnson et al .,1988).**

Significant increase of HLA - B_{17} was found in couples with repeated spontaneous abortions in comparison with normal couples **(Vanoli et al., 1985)** .

Women suffering from repeated spontaneous abortion have a significant low prevalence of serum anti-cytomegalovirus antibodies. **(Radcliffe et al., 1986).**

Recent reports strongly suggest an association between a laboratory picture of autoimmunity in the absence of clinical signs and symptoms and the recurrence of spontaneous pregnancy loss . This association is strong particulary when circulating lupus anticoagulant is present . It was also found to exhibit a distinct IgM gammopathy **(Gleicher and Friberg 1985).**