## **SUMMARY AND CONCLUSION**

This work aims studying of some immunological features of women suffering from unexplained spontaneous abortions. These studies include 1) prevalence of HLA-B12 and -B17 among cases with sharing with their spouses. 2) prevalence of C.M.V. IgG and IgM antibodies and their immune response to C.M.V. 3) prevalence of ANA positive test results 4) Determination of serum total IgM.

Ninety two couples with repeated spontaneous abortions and fifty control couples were included in this study.

Study group was divided into different subgroups according to type of abortion, frequency of abortion and age subgroups.

Both groups also were divided into further subgroups in case of C.M.V. according to residence and socioeconomic levels.

It is concluded that HLA-B12 and -B17 were nearly similar prevalent in both study and control groups. Also sharing of these antigens between partners was nearly similar between both groups. Prevalence of positive results of C.M.V. IgG antibodies were significantly lower in study group than control group. Also positive results of ANA were significantly higher in study group than control group. Total serum IgM gammopathy was non significantly higher in study group than in control group.

Secondary aborters were more positive for HLA-B12 and sharing than primary aborters. Also they were more positive for HLA-B17.

Primary aborters were more significantly seropositive for C.M.V. IgG antibodies, but less as regard to C.M.V. IgM antibodies than secondary aborters. Primary aborters were more positive for ANA, but less as regard to IgM gammopathy than secondary aborters.

Women who aborted less than five times were more positive for HLA-B12 and HLA-B17 than women who aborted more than five times. Also they were more seropositive for C.M.V. IgG antibodies but less for C.M.V. IgM antibodies and for ANA positive results. IgM gammopathy was more prevalent in women who aborted less than five times than those aborted more than five times.

HLA-B12 was more prevalent in age group 26 to 30 years, but HLA-B17 more prevalent in age group 19 to 25 years C.M.V. IgG antibodies seropositive results were more prevalent at age group 31to 35 years, but C.M.V. IgM antibodies were more at 26 to 30 years age group.

ANA positive test results were more prevalent at age group 19 to 25 years, also IgM gammopathy was more prevalent in this age group.

In case of C.M.V. IgG antibodies low socioeconomic patients were more seropositive and also for C.M.V. IgM antibodies than high socioeconomic level patients.

Rural patients were more positive for C.M.V. IgG and C.M.V. IgM antibodies than urban patients.

## **Recommendations:**

- 1. In this study it was found that the degree of HLA sharing can not always be directly associated with habitual abortions. So it is not recomended as a common investigation to do HLA typing and sharing for these patients with their partners.
- 2- As the response of these patients for C.M.V. is lower than normal.

  Other serological studies of these women should include consideration of immune responses to other viruses such as other herpes group viruses.
- 3- Screening patients for ANA is an important test and should be done routinely. Also screening patients with other autoimmune conditions such as:- rheumatoid arthritis, scleroderma, mixed connective tissue disease, polymyositis, and dermatomyositis is recommended.