SUMMARY AND CONCLUSION

Summary:

The present study was carried out on 50 women who were selected from out- patient clinic of recurrent abortion unit of El Demerdash Hospital at Ain Shams University and from out-patient clinic of obstetric and gynecology department of Benha University.

This work aimed at studying of plasma level of anti-annexin A5 antibodies in pregnant women with history of RM, multigravidae pregnant women with no history of RM and healthy non pregnant females with no history of pregnancy losses and studying whether anti-annexin A5 antibodies values in the pregnant women of RM are different from those in other women. This is to investigate the possible role of anti-annexin A5 antibodies in inducing RM.

The study included 3 groups:

Group I (30 women): pregnant women during the first trimester of pregnancy with a history of three or more consecutive pregnancy losses.

Group II (10 women): Multigravidae pregnant women during the first trimester of pregnancy with no history of pregnancy losses as a control pregnant group.

Group III (10 women): Non pregnant healthy women with no history of pregnancy losses as a control non pregnant group.

All women in the study were subjected to full history taking, general, abdominal and vaginal examinations. Ultrasonography and routine laboratory investigations were done and others were taken from the file of the patients to exclude other possible causes of RM rather than anti- annexin A5 antibodies.

The plasma anti- annexin A5 antibodies concentrations were measured for all women by using ELISA kits.

The results of the work can be summarized as follows:

- The percentage of antibody positivity for IgG anti-annexin A5 antibodies were found to be not significantly different in patients with history of RM (3.3%) when compared to the control pregnant group (0%) and the control non pregnant group (0%), while IgM was found to be similar in all groups (10%).
- The mean antibody concentrations of both IgG and IgM anti-annexin A5 antibodies were approximately similar in all groups
- The P values of both IgG and IgM anti-annexin A5 antibodies were > 0.05 indicating that there was no statistical significance when comparing GI with GII or GIII and comparing GII with GIII.
- There were no statistically significant correlations between anti-annexin A5 antibodies and other parameters of the study except for the IgG anti-annexin A5 antibodies which show positive significant correlation between it and PT and negative significant correlations between it and FT4.
- The anti-annexin A5 antibodies were not considered as a sensitive test regarding RM but were a highly specific one.
- The percentage of antibody positivity for IgG antibodies to Toxo., CMV and ACA were found to be higher in patients with history of RM (40%- 86.7% and 20%) when compared to the control pregnant group (0% for all antibodies) and the control non pregnant group (0%

for Toxo and ACA, 10% for CMV), while IgM was found to be similar in all groups (0% except Toxo. which was 10% in GI).

- The mean antibody concentrations of IgG antibodies to Toxo., CMV and ACA were found to be higher in patients with history of RM when compared to the control pregnant group and the control non pregnant group, while mean antibody concentrations of IgM were approximately similar in all groups.

- The P value of IgG antibodies to Toxo., CMV and ACA were found to be < 0.05 indicating statistical significance while that of IgM were > 0.05 indicating that there was no statistical significance when comparing GI with GII or GIII and comparing GII with GIII

Conclusion:

From the present study, it was possible to conclude that:

- This small-scale study did not confirm that anti-annexin A5 antibodies have a prognostic significance in predicting RM when measured in healthy women.
- It was not possible to confirm that IgG antibodies to Toxo., CMV and ACA were the main cause of RM.

Recommendations:

- Further studies are required on large scale of patients with repeated abortions to clarify the role of anti- annexin A5 antibodies in inducing RM.
- Further studies are required on APS patients with RM to clarify the correlation of anti- annexin A5 antibodies in APS patients and RM.

- Detection of different individual types of anti-annexin A5 antibodies IgG, IgM and IgA.
- Detection of other antibodies against other members of annexin family.
- Making rising titter of IgG antibodies to Toxo., CMV and ACA to determine whether they have role in inducing RM or not.