

***Paper 14: “Association between Factor V Leiden Mutation and Poor Pregnancy Outcomes among Palestinian Women in the West-Bank Region of Palestine”***

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**Abstract:**

Pregnancy is a hypercoagulable state, with increased tendency for thrombus formation, a condition that is increased when pregnancy is combined with thrombophilia. Thrombophilia could be acquired or inherited. Among the inherited types is Factor V Leiden mutation, an autosomal dominant trait with reduced penetrance. The mutation is believed to be associated with different poor pregnancy outcomes including recurrent miscarriages. In the present study we investigated the potential relationship between the leiden mutation and poor pregnancy outcome among Palestinian women residing in the West bank region of Palestine. A case-control study was conducted with 191 test subjects with recurrent miscarriages, intrauterine fetal death (IUFD) and pregnancy induced hypertension (PIH), and a control group comprised of 205 women with successful pregnancies without any complications. The leiden mutation was detected in 50 cases out of 191 test group (23.6%), and in 24 out of 205 controls (11.7%). Interestingly, the homozygous genotype of the mutation was only detected among the test subjects. A significant relationship is evident between the mutation and recurrent miscarriages with p-value < 0.001. This relationship also proved significant between mutation and the various stages of abortion among the two groups. Evidently, with first trimester abortion, the odds ratio was 2.377 and p-value = 0.005, while the second trimester abortion comparison gave an odd ratio 6.464 and p-value = 0.000 and the IUFD had odd ratio value 3.352 and p-value = 0.015. No significant relationship is evident among the leiden mutation and pregnancy induced hypertension in our study. The results indicate a significant relationship between recurrent miscarriages and Factor V mutation in our population.