Summary

The anti-phospholipid antibodies syndrome (APLS) whether primary or secondary, and systemic lupus erythematosus (SLE),both are auto-immune diseases are implicated, in a form or another, in the development of myocardial infarction (MI) especially among young ages.

The present study has carried out to detect anti-phospholipid,anti-cardiolipin and anti-ds DNA autoantibodies in a group of 60 (18-50-year-old) MI patients (38 males and 22 females) and another group of 24 who were apparently healthy have also enrolled as a control group .These patients have admitted to Intensive care unit in Al-Diwaniya teaching hospital during Nov.,2012-Jun.,2013.Those auto-antibodies have been detected using ELISA. Inaddition, restricted fragment length polymorphism(RFLP-PCR) was applied to track another risk factor for MI; the V Leiden mutation in all patients .

The statistical results of aPL-antibody revealed significant difference ($P \leq 0.001$) between MI patients and healthy subject group where it at medians of 0.36 and 0.34 U/ml in the sera of respective group (ranged from 0.27-1.82 in the MI group and from 0.2-0.67 in healthy group).The anti-dsDNA autoantibody was significantly raised among MI patients (median 33.5 U/ml ,ranged from 4.1-488.2) compared to healthy individuals (median 8.4 U/ml , ranged 4.2-12.9).In contrast to the two above auto-antibodies,theaCLtiter hasn't differed significantly among both group .Using ROC statistical analysis, the aPL and anti-dsDNA have offered good diagnostic values at areas under curves of 0.880 and 0.950,respectively .However the qualitative assays for these auto-antibodies have revealed significance for anti-dsDNA only.

Regarding the V Leiden factor, theintention of this gene has detected in 33(76.7%) of MI patients while only 3 (33.3%) of healthy control group were

found to express this mutation. Finally, a good correlation(r=0.317,p=0.014) has been found between the aCL and anti-dsDNA production among MI patients. The anti-phospholipid syndrome and/or asymptomatic SLE should be investigated in such age group of MI patients . In addition , the V Leiden factor mutation screen may aid clinicians in a good management of their patients.