SUMMARY AND CONCLUSION

A positive family history of myocardial infarction is recognized as one of the coronary risk factors and seems to be related to serum lipids, lipoproteins and apolipoproteins.

To assess the potential use of the lipids, lipoproteins and apolipoproteins as risk factor for coronary artery diseases (CAD) in the offsprings of myocardial infarction (MI) patients, 30 asymptomatic offsprings (15 males and 15 females) of MI patients and also 30 healthy subjects (15 mals and 15 females) of the same age range serving as controls had been subjected to the following:

* Thorough medical history taking and clinical examination including electrocardiography (ECG).
* Evaluation of blood sugar levels both during fasting and after mixed meal.
* Estimation of serum levels of uric acid.
* Estimation of serum levels of triglycerides, total cholesterol, low density lipoprotein cholesterol (LDL-c) and high density lipoprotein cholesterol (HDL-c).
* Determination of serum levels of apolipoprotein A (Apo-A) and apolipoprotein B (Apo-B).

The results of the study revealed that male offsprings of MI patients showed lipid and apolipoprotein abnormalities in the form of significant lowering of serum HDL-c, Apo-A and ratio of

serum Apo-A/serum Apo-B with significant elevation of serum total cholesterol/serum HDL-c ratio, serum LDL-c/serum HDL-c ratio, serum levels of total cholesterol, triglycerides and LDL-c followed by significant elevation of serum Apo-B compared to their age-matched controls. While, female offsprings of MI patients showed lipid abnormalities in the form of significant lowering of serum HDL-c with significant elevation of serum triglycerides, total cholesterol, serum total cholesterol/serum HDL-c ratio and serum LDL-c/serum HDL-c ratio followed by significant elevation of serum LDL-c compared to their age-matched controls. But, serum levels of Apo-A, Apo-B and serum Apo-A/ serum Apo-B ratio showed no significant difference from those of their age-matched controls.

These lipid and apolipoprotein abnormalities in the sibilings of MI patients could explain the clustering of MI in families and could be attributed to genetic trait since environmental risk factors known to affect serum lipids and apolipoproteins were not present in those offsprings.

Hence, we could concluded that, among Egyptians serum lipid abnormalities are evident among offsprings of MI patients whether male or female. But, serum apolipoprotein abnormalities are evident among the male offsprings only and not the female ones. So, among Egyptians, the serum levels of Apo-A, Apo-B and their ratio could be considered as sensitive index for identifying risk subjects among the offsprings of MI patients.

like other lipid parameters but, to a lesser extent as they show significant difference in males only and not in the females.