

SUMMARY AND CONCLUSION

One hundred and fifty diabetic patients and fifty reference cases taken from Benha University Hospital and institute of Diabetes of Egypt, were investigated for blood sugar, glycosylated haemoglobin, serum lipids, lipoproteins, cholesterol in different lipoprotein fractions, apolipoprotein B and anti-insulin antibodies. Out of them fifty were IDD, half of them was males and the other was females. They were poorly controlled. The remaining one hundred patients were NIDD receiving Daonil as an oral hypoglycaemic. Half of them was males and the other was females. Each sex group was divided into equal halves as regards the degree of control. To facilitate interpretation of the results and their discussion, each group was given a number, which made up eight groups. The first two groups referred to reference male and female respectively. The third and fourth groups were IDD male and female respectively. The fifth and sixth groups were NIDD males uncontrolled and controlled respectively. The last two groups seventh and eighth were NIDD females uncontrolled and controlled respectively.

Blood samples were collected after a period of overnight fast (ranging from 12-14 hours) and another post-prandial (2 hours after mixed meal) blood samples were also collected.

The aim of this study was to correlate the previously described lipid parameters, as risk factors, (especially cholesterol in different lipoprotein fractions, and apolipoprotein B) with the diabetic status. Another aim was to compare the risk in diabetic Egyptians with that recorded in other non-egyptian studies. This was in a trial to predict the most risky group or groups and the extent of this risk as a step in its modulation. A third aim was to find out the benefit of control, if present.

The results of this work showed that the risk in Egyptian diabetics was nearly similar to that recorded in non-Egyptians, and that it may be related to a syndrome rather than to environmental and other factors. This appeared in the form of, hypertriglyceridaemia, hyperprebeta lipoproteinaemia, mild increase in apolipoprotein B low HDL cholesterol, variable elevation of LDL cholesterol, increased T/H and L/H ratios, and abnormal elevation in blood sugar level. This combination of errors might have a direct or indirect atherogenic potential effect on those patients. This work could also show that the most risky groups were, NIDDM uncontrolled males followed by NIDDM controlled males, the IDDM males and females. In the latter groups, the risk parameters were directly related to age and duration of the disease. The minimal risky groups were NIDDM females, uncontrolled and then the controlled ones respectively. About the effect and degree of control, it was found to modulate the risk ratios but not so much so to normalize it in the NIDDM. This could be shown in the slight reduction in the risk factors generally in the controlled groups, also in the cut-short of the direct correlation between the fasting blood sugar level or glycosylated haemoglobin, and risk factors.

The effect of control on IDDM could not be studied in this work, as it is deficient in such groups. This might be an indicator of inadequate control of IDDM patients not only in this present work, but also by the traditional lines of control for those patients.

Hence, we could conclude that lipoproteins, cholesterol in different lipoprotein fractions and apolipoprotein B should be studied in diabetic patients regularly to evaluate and modulate the risk condition and to be satisfied by the effect of control, with special concentration on the groups at more risk described above.