
correlation Between Serum Insulin and Ischaemic Heart Diseases

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The possible role of plasma insulin levels as an independent risk factor for development of CHD has been studied in 30 non-diabetic male patients with different varieties of CHD and compared this with the control group. Patients were selected from Port Said General Hospital intensive coronary care unit. They were non-smokers, non-diabetic working men and free from any other medical disease. Also, they were initially free from heart disease. The mean age of all cases was 50 ± 16.8 years. After an overnight fasting, a blood sample was collected from each subject. The serum was separated from each blood sample by centrifugation to be used in the estimation of the following biochemical levels: 1-Fasting serum insulin level, using RIA. 2-Fasting serum glucose level, using the glucose oxidase method. 3-Serum C.P.K. level, in patients with acute myocardial infarction only to confirm the diagnosis, using the method of Anon (1977). The results obtained showed a significant increase in the estimated insulin level at different varieties of CHD. This supports the well known hypothesis that high circulating insulin levels may be associated with the development of CHD. It is concluded that hyperinsulinemia constitutes an independent risk factor for CHD in middle aged non-diabetic men. Further studies are required to elucidate the role of insulin in the aetiology of CHD in man, but the hypothesis of a direct effect on the atherosclerosis process may be considered from the present evidence.