

Risk factors for coronary artery disease in non-insulin dependent diabetes mellitus: United Kingdom Prospective Diabetes Study (UKPDS: 23)

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OBJECTIVE: To evaluate baseline risk factors for coronary artery disease in patients with type 2 diabetes mellitus. **DESIGN:** A stepwise selection procedure, adjusting for age and sex, was used in 2693 subjects with complete data to determine which risk factors for coronary artery disease should be included in a Cox proportional hazards model. **SUBJECTS:** 3055 white patients (mean age 52) with recently diagnosed type 2 diabetes mellitus and without evidence of disease related to atheroma. Median duration of follow up was 7.9 years. 335 patients developed coronary artery disease within 10 years. **OUTCOME MEASURES:** Angina with confirmatory abnormal electrocardiogram; non-fatal and fatal myocardial infarction. **RESULTS:** Coronary artery disease was significantly associated with increased concentrations of low density lipoprotein cholesterol, decreased concentrations of high density lipoprotein cholesterol, and increased triglyceride concentration, haemoglobin A1c, systolic blood pressure, fasting plasma glucose concentration, and a history of smoking. The estimated hazard ratios for the upper third relative to the lower third were 2.26 (95% confidence interval 1.70 to 3.00) for low density lipoprotein cholesterol, 0.55 (0.41 to 0.73) for high density lipoprotein cholesterol, 1.52 (1.15 to 2.01) for haemoglobin A1c, and 1.82 (1.34 to 2.47) for systolic blood pressure. The estimated hazard ratio for smokers was 1.41 (1.06 to 1.88). **CONCLUSION:** A quintet of potentially modifiable risk factors for coronary artery disease exists in patients with type 2 diabetes mellitus. These risk factors are increased concentrations of low density lipoprotein cholesterol, decreased concentrations of high density lipoprotein cholesterol, raised blood pressure, hyperglycaemia, and smoking.