Mortality in Diabetes

Some Conventional Paradigms

*

The relative risk of death for subjects with diabetes adjusted for age, sex and BMI is 2-3 times as compared with non-diabetes.

*

In diabetes, standardized mortality ratio (SMR) has been reported as 1.66 for males and 2.16 for females; highest ratio being found in the second and third decades of ages.

*

Young- onset diabetes has a substantially greater impact on mortality than older-onset diabetes does.

*

Majority of the studies on mortality indicate that the mortality in NIDDM is not related to the duration of the disease. Again the mode of treatment or the extent of glycaemic control does not seem materially to influence mortality in NIDDM.

*

Although risk of cerebrovascular accident (CVA) deaths has been much higher for diabetic than non-diabetic men of every age stratum, ethnic background and risk factor level. Overall, it is three times higher with adjustment for age, race, income, serum cholesterol level, systolic BP and reported number of cigarettes a day (MRFIT - study Diabetes Care, 1993;16:435-44)

*

Diabetes appears to confer a substantial higher risk of mortality to women than in men when it occurs in the presence of coronary heart disease.

Predictors

In a population based cohort study of 248 NIDDM patients followed for a mean period of 6.1 years in Oxford U.K. 1993, the predictive power of microalbuminuria as an independent risk factor for excess mortality in patients with NIDDM has been reported. (Diabetes Care 1993;16:996-1003)

*

In a year follow-up, CDC, Atlanta (1994) it was concluded that HDL-C level of 50mg/dl and VLDL-C level of > 20mg/dl was predictive of ischaemic heart disease mortality amongst diabetic women. Interrelated to complications due to macrovascular diseases is the recent recognition of plasmingen activity inhibitor activity, proinsulin or the split products.

*

Patients with diabetic automatic neuropathy exhibit decreased heart rate variability and are prone to sudden death. (Amer Heart J 1993;125:74-52).

*

Overall activity level is inversely related to mortality risk. Sedentary(<1000 kcal/week) males were three times more likely to die than active males(>2000 Kcal/week) (Amer Heart J 1993;137:74-81).

*

In a trial of asprin vs placebo in Early Treatment Diabetes Retinopathy Study (ETRDS), mortality from all causes was specifed as the primary outcome measure for assessing the systemic effects of asprin, relative risk for total mortality for asprin vs placebo treated patients for entire study period (1980-85) was 0.91 (99% Cl-0.75-1.1) (JAMA 1992;268:292-300).

M.M.S.A.