EDITORIAL

DIABETES MELLITUS: A MAJOR CARDIOVASCULAR RISK

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Cardiovascular disease (CVD) is the major cause of morbidity and mortality in the diabetic population causing up to 80% of deaths in these patients.[1] Diabetes mellitus is an independent risk factor for cardiovascular disease mortality, increasing this risk by 1.5 to 4.5 fold.[2] The prevalence of diabetes world wide is estimated to increase to 4.4% of the population by the year 2030 (366 million individuals) from 2.8% in 2000 (171 million individuals).[3]

Recent data suggest that non-diabetic individuals with some degree of glucose intolerance may also be at increased risk of CVD. These are the individuals whose plasma glucose levels are above normal but not high enough to meet the diagnostic criteria of diabetes mellitus; they are described as having impaired glucose tolerance (IGT) or impaired fasting glucose (IFG). IGT is defined as a 2 hour post challenge plasma glucose level of 7.8 -11.1 mmol/L and IFG as a fasting glucose level of 5.6 - 6.9 mmol/L.[4]

Epidemiological studies indicate that cardiovascular risk is increased both in people with early glucose intolerance and in those with established diabetes. An analyzed data from 20 published studies assessed the risk of CVD according to the baseline glucose level in almost 96,000 people. Compared with a glucose level of 4.2 mmol/L, the relative risk of a cardiovascular event was 1.58 for a 2 hour plasma glucose level of 7.8 mmol/L.[5] In National Health and Nutrition Examination Survey–II (NHANES-II) the risk of all cause mortality was 42% higher in individuals with IGT than in those with normal glucose tolerance and further increased in individuals with diabetes. A similar pattern of adjusted risk was observed for CVD mortality.[6]

Surveys from various areas of Pakistan suggest the prevalence of DM to be 11-17% and total glucose intolerance (DM+IGT) as high as 25% in those aged 25 years or above.[7] According to WHO Pakistan ranked number 8 worldwide in 1995 with 4.3 million diabetic patients and is expected to rank number 4 with 14.5 million patients suffering from diabetes in the year 2025.[8]

Looking at the rapidly increasing number of diabetic patients in our society and the increasing recognition of IGT as a risk factor for CVD, it is important that such individuals are diagnosed at an early stage.

Physicians and the community both have the responsibility to spread knowledge and awareness regarding the common complications of Diabetes mellitus in general and cardiovascular complications in particular. The possible asymptomatic nature of diabetes at least in its early stages should be recognized and diagnosed through an effective survey system to minimize the risk of complications of this disease.

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