EDITORIAL

Diabetes Mellitus in Indigenous Africans

A recent global review of the prevalence of diabetes mellitus has highlighted an ever increasing prevalence of the disease worldwide, with population of developing countries and minority in industrialized countries facing the greatest risk [1]. Unfortunately, such data on indigenous Africans are at best scanty, despite the fact that Africa is the second largest continent with an estimated population of 55 million living in 58 countries and comprising of around 1000 ethnic groups [2]. Notwithstanding these limitations, there is clear evidence that Africans are not genetically protected from NIDDM.

Since the introduction of the revised WHO criteria for the diagnosis of diabetes, only the studies in Tanzania and South Africa have been based on these standards. Other recent surveys used random blood glucose levels based on reflectance meters as screening tests or only fasting blood glucose levels [7, 8, 9]. The prevalence is low in Tanzania (1.1%) [3], but it is much higher in the different indigenous population of South Africa (5.3 – 8%) [4, 5, 6] and in urban Tunisians (3.8%) [7]. Moreover, the disease appears to be more common in urbanized Tanzanians (1.9%) and Tunisians (3.8%) compared with their rural counterparts (0.5% and 1.8% respectively) [3, 7]. Lifestyle factors probably account for these differences as has been shown in the Pacific islands [10]. Interestingly a recent South African study found little difference in the prevalence of diabetes between an urban and a rural community [6]. A possible reason is that urbanization and industrialization have affected the various parts of the country in such a way that it would be difficult to find a community subsisting on a truly rural diet.

Comparison of the prevalence of impaired glucose tolerance (IGT) to that of NIDDM provides a useful index of the epidemicity of NIDDM because it has been postulated that a high IGT to NIDDM ratio represents a lifestyle preventing the emergence of diabetes whilst the converse is true of a falling ratio. Thus, it comes as no surprise to find a much higher IGT/NIDDM ratio in Tanzania (8 : 1) and a much lower ratio in South African Blacks (0.9 : 1 to 2 : 1) [3, 4, 5, 6].

The question as to whether NIDDM is increasing in indigenous Africans is difficult to answer because of paucity of the data. However, available information suggests an impending diabetes epidemic in South African Blacks and an early stage of this phenomenon in Tanzania and possibly in places elsewhere in Africa.

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