Editorial

Diabetes in the 90’s: Prospects and Challenges

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Today ample information and means exist to significantly alter the course of diabetes mellitus in the majority of patients. Clinical and basic research during the past decade have dramatically altered our concepts concerning the causes and natural history of diabetes. Not only can we detect the disorder(s) earlier but we may be able to identify individuals at high risk and eventually predict the onset of the disease.\(^1\)\(^-\)\(^3\) There is even the promise that in the future we may be able to prevent these diseases.\(^3\)\(^,\)\(^4\) Current regulation of genetic immune and metabolic markers in type 1 diabetes may allow prediction of the development of diseases in high risk groups sufficiently early to enable treatment before Beta-cell function is destroyed. Beta-islet cells transplantation may now be possible in children as less toxic immunosuppressive agents are developed.\(^5\) Certainly, we can change the level of severity of the underlying conditions (e.g. hyperglycaemia) and delay or slow the progression of its complications, as evidenced by the just completed multicentre Diabetes Control and Complications Trial.\(^6\) Thus, the long-term outlook for a diabetic today should be not only better, but good.

The current challenge in the care of diabetic patients is to find strategies to minimize the development of diabetic complications. Self-monitoring of blood glucose offers an excellent method for improving metabolic control.\(^7\) Monitoring of glycosylated hemoglobin or serum fructosamine provide supplemental measures to reinforce this primary aim.\(^8\)\(^,\)\(^9\) Additionally, earlier detection of microalbuminuria by more sensitive assays and dipsticks hold the promise of screening and intervening early to prevent end-stage renal failure.\(^10\)\(^,\)\(^11\) Recent evidence suggests that the incidence of diabetic nephropathy is already decreasing, probably due to earlier and more effective antihypertensive therapy.\(^12\)\(^,\)\(^13\) Thus, earlier screening and intervention should considerably diminish the impact of diabetes in high risk patients.

A population strategy offers even greater opportunities for deflecting the outcome in many non-insulin-dependent diabetics NIDDM. Altering the lifestyle of large populations and modifying environmental determinants could delay the onset and retard the progression of the disease.\(^3\)\(^,\)\(^14\) Regular exercise, dietary control of central obesity and better treatment for NIDDM and hyperglycaemia clearly hold promise of changing these important risk factors.\(^4\) Added to these, the stopping of smoking and the control of hypertension would eliminate many of the cardiovascular complications of diabetes.
Thus, the prospect looks inviting. But there are often caveats to every opportunity and promise. One, of course, is the very magnitude of the problem, which appears to be growing in regions such as ours in the Middle East. The prevalence and costs of diabetes are increasing everywhere. Both because of increasing affluence in many countries, and because of the aging of all populations. But even more worrisome is the failure to transfer this knowledge and technology to populations at risk or to encourage their adoption. Changes in lifestyle and better health education do not seem to take hold of individuals, even when they are made available, as demonstrated by a recent campaign in Britain.

How much of this failure is due to the feeble efforts of health professionals and how much to the intransigence of human nature is debatable. However, the fact is that unless we can get patients to alter lifestyles or to adopt preventive measures, all our knowledge and technology will not influence the course or outcome in most diabetic patients. Education and counselling must become an effective part of our strategy. What is needed now is an effective means of realizing prevention or control in order to make a difference. Better ways of influencing patterns of behavior and compliance and of motivating lifestyle changes are the only hope for fulfilling the promise of diabetes demise in the 21st Century. With the aid of our contributors we hope that this new journal can do this worthy goal in the years ahead.

References

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