



EDITORIALS

INTERLINGUA IN DIABETES

In this issue of *DIABETES*, summaries of original scientific articles are presented in Interlingua. *DIABETES* now follows the example already set by ten other medical journals in attempting to provide for foreign readers easy access to an understanding of its contents.

Interlingua is an international or supranational language constructed by the collection of words common in the various European languages and their synthesis in a systematic pattern. "Interlingua is French modified by Spanish, English, Italian—; it is Italian modified by Portuguese, German, Latin—; it is Latin modified by French, English, Spanish—; it is the common language of western civilization—." The use of Interlingua is sponsored by Science Service, The Institution for the Popularization of Science organized in 1921 as a non-profit corporation with trustees nominated by the National Academy of Sciences, the National Research Council, the American Association for the Advancement of Science, the E. W. Scripps Estate, and the journalistic profession. The Interlingua Division of Science Service is headed by Dr. Alexander Gode.

In addition to its employment in medical journals, the service potential of Interlingua was strikingly demonstrated in the program of the Second World Congress of Cardiology which met in Washington, D.C., last September. This publication contained Interlingua summaries totaling 85,000 words and was placed in the hands of more than 3,000 cardiologists representing some 50 different nations.

With Interlingua summaries available in *DIABETES*, the foreign reader whose knowledge of English is limited should be enabled to learn from quickly scanning the summary the meaning and significance of every article. He can then select for careful reading and perhaps laborious study those which are interesting and important from his point of view. It is hoped that this innovation will promote more effectively the usefulness of the Journal beyond the limits of English-speaking countries.

PROGNOSIS OF DIABETES IN RELATION TO TREATMENT

The life expectancy of diabetics has more than trebled during the past 34 years.¹ Coma as a cause of death is becoming rare but in its place, degenerative changes in the blood vessels in the kidneys, heart, eyes, extremities and elsewhere are appearing with increasing frequency. These vascular changes seem to be specifically diabetic. Lundbaek² in his monograph on "Long-term Diabetes" summarizes ably the basis for the distinction from ordinary arteriosclerosis. It seems reasonable to designate as *late diabetic syndrome*, manifestations which apparently result from long-term diabetes mellitus and to reserve the term *diabetic complications* for conditions not genetically related to diabetes, such as carbuncle, tuberculosis, pneumonia and others. The cause of the late diabetic syndrome, whether lack of insulin, suprarenal or other hormonal dysfunction, and/or a disorder of lipid metabolism, is still unknown. For the patient, however, the most important question is—can it be avoided?

Some authorities consider the late diabetic syndrome to be the unavoidable consequence of diabetes of long duration and believe insulin as well as diet to be of no value to prevent or combat it. Hereditary constitution or a hitherto unknown pancreatic factor are said to determine how soon it will develop. Others are more hopeful. The series of cases selected for award of the Joslin "Quarter Century Medal" is significant. The medal is awarded to persons who have had diabetes for twenty-five years or more and have been found free from late complications. Since all individuals who have received the medal are said to have had good control of diabetes at least during the first years, it can be assumed that there is a relation of cause and effect between good control and a favorable course of the disease. As long as there is no better explanation, there is not only justification but an obligation to base treatment on this working hypothesis. This opinion is strengthened by the com-

parison of diabetics who have had good control of the condition with others who have had poor control. Evidence from various sources³⁻⁶ shows a lessened incidence of late symptoms for the former group. It must be conceded, however, that even in cases receiving excellent control, retinopathy has not always been avoided.

My associates and I^{7, 8} have studied the present condition of 103 patients who have had diabetes for 20 years or more. In agreement with the previous observations made elsewhere, we have found in Switzerland that the severity of the disease (as indicated by the insulin dosage required), and the kind of insulin (regular, slowly acting, combinations) had no apparent influence on the development of late symptoms. On the other hand, the prognosis was affected greatly by the age of the individual and the degree of control of diabetes.

Approximately one-fifth of cases were practically free from late symptoms. One fifth showed slight and three-fifths showed marked vascular changes. Of 28 diabetics who had onset of the condition before the age of 30, 15 showed no vascular changes, and 3 minimal changes. Of 75 older diabetics, 52 showed advanced degenerative changes. Of 21 diabetic patients in whom the disease had been kept under continuous good control, only one had advanced and 9 had minimal vascular lesions. On the other hand, of 32 patients who had never had good control of the disease, only 2 escaped late vascular lesions; 2 others had minimal symptoms and 28 had the typical late diabetic syndrome. Of the 2 poorly controlled cases in which there was freedom from vascular degeneration, one was a poor farmer in the mountains of Switzerland who for economic reasons was compelled to exist on a low-caloric food intake while performing hard manual labor; he used so much insulin that he was barely free from hypoglycemia. In the other case, the patient was a wealthy farmer from South America who led an active life spending much of his time on horseback; he was accustomed to eating much meat and using insulin liberally.

Although it cannot be determined with absolute certainty that our treatment with diet and insulin can prevent the late diabetic syndrome, I am convinced that good control of diabetes still offers the best opportunity

of avoiding or at least retarding its future development. The few cases in which there is exceptionally little tendency to show progression, and the favorable course of juvenile diabetes during the first eight to ten years of treatment with insulin, should not encourage a careless attitude towards control of glycosuria and hyperglycemia. A pediatrician who is unable to follow his juvenile cases may not be fully aware of the late complications appearing when his patients have outgrown their childhood. A physician who begins the treatment of a young person with diabetes must accept responsibility for the welfare of the individual for twenty years and more in the future, even if the ultimate result of his treatment cannot be foreseen. The therapy which at present seems to offer the best outlook should be based on good control with diet, insulin and exercise.

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