



EDITORIALS

THE INFLUENCE OF THE PATIENT'S BEHAVIOR AND HIS REACTION TO HIS LIFE SITUATION UPON THE COURSE OF DIABETES

Although we have learned a great deal about the metabolic defect in diabetes, and understand much about its pathogenesis, we still lack a definitive knowledge of the etiology of the syndrome, and we are unable to "cure" it in the sense we can cure pneumococcus pneumonia or acute appendicitis. We are forced to "manage" the disease by controlling its manifestations in so far as this is possible. Such control is dependent upon the control of the factors which influence the manifestations of the disorder. The variables which are generally recognized as pertinent to its clinical management, and which we know must be controlled in order to control its manifestations, fall into only a few general categories. They may be listed as (1) dietary intake, (2) insulin dosage, (3) physical activity, (4) intercurrent disease, and (5) the behavior of the patient and his relation to his life situation. The last group of variables, which are the most difficult to control, are often those which are least understood by the physician, and which receive the smallest part of his consideration.

We do not yet know whether there are any personality features which are inextricably linked with diabetes. There may well be none. But, for whatever reason, certain types of behavior are often seen among patients with diabetes; and they may immensely complicate therapy. Perhaps the most common of these is an unusual need to eat. Hyperphagia is a cardinal symptom of diabetes. Often it is based upon an insistent craving for food, which becomes more intense during periods of loneliness, boredom, tension, and dejection. It may long precede the appearance of hyperglycemia and glycosuria, and it is not always abolished by treatment with diet and insulin. Because of this craving for food many patients cannot or will not restrict their food intake.

There is some reason to believe that it is common to both obesity and to diabetes, and that it is based upon a quantitative defect in the function of the hunger-satiety mechanism that is controlled by centers in the midbrain.

There is also much evidence that the disturbance is particularly great among the pathologically obese, whose lives have been featured by lack of affection and security, and who use food both consciously and unconsciously as a substitute gratification. Whatever its cause, its effect is clear. It makes adherence to diet peculiarly difficult for some people with diabetes—much more difficult than a thin, healthy physician may imagine. It explains much of the laxity, irregularity, willful "cheating" and outright disregard for dietary prescriptions which some patients exhibit.

The person with diabetes, like other humans, requires a balanced diet of adequate caloric content, consumed at regular intervals. The physician need not hesitate to make this clear to his patient. Nor should he pretend that it is a matter of no consequence if his patient eats himself into obesity, or eats so irregularly as to impede the management of his illness. But when patients demonstrate an inability or unwillingness to control their eating, the physician's attitude toward this should be one of dispassionate investigation rather than moral indignation. He will often find it more profitable to attempt to help the patient control his appetite rather than to insist upon a rigid dietary prescription.

Another type of behavior, seen frequently among juvenile and adolescent diabetics, is an alternation between dependent and overdemanding behavior, and explosive rebellion. This behavior pattern usually centers around the mother; but it may also involve a physician or anyone else in a position of parental authority. Those who have studied such patients believe that they feel an intense need for the approval, affection, and protection of the parent, and make excessive demands upon his time and patience in order to obtain these. Eventually the parent reacts with annoyance and rejection, and the patient reacts with hostility and acute rebellion which may include willful disregard of diet, failure to take insulin, disregard of necessary aseptic precautions, and deliberate attempts to precipitate diabetic acidosis.

Because the physician has a long-term, parent-like relationship to his juvenile and adolescent patients, he may find himself involved in a similar cycle with his patient, who makes demands upon his time and patience, who shows need for reassurance and attention, and who at the

same time may be provocative and annoying, deliberately disregarding directions and failing to cooperate with his regimen. Here again, the physician is called upon to exhibit dispassionate concern rather than moral indignation. The problem is that of attempting to understand and control the behavior of the patient in order that his diabetes can be controlled, and this problem is more likely to be solved by an investigation of its causes than by a punitive insistence on a rigid regimen.

Such overt disturbances of appetite and gross behavior provide only a partial explanation of the manner in which the patient's reaction to his life situation may affect the course of his illness. Experimental observations carried out over the past fifteen years have demonstrated that men's reaction to their life situations are associated not only with changes in their mood, thoughts, and gross behavior, but also with direct changes in bodily processes. There is now good reason to believe that any physiological process which can be influenced by the voluntary nervous system, the autonomic nervous system, or the glands of internal secretion, can be altered as men adapt to their social environment. Such adaptations may include changes in energy metabolism and in fluid balance, both of which can have an important effect upon the course of diabetes, even in the absence of any changes in the gross behavior of the patient. Alterations in metabolic patterns may be associated with alterations of circulating glucose and ketone bodies, and evidently with changes in the rate of utilization of glucose in the peripheral tissues; and they may be reflected in changes in the glucose tolerance curve. Likewise, changes in fluid balance during adaptive reactions may be associated with marked alterations in the rate of excretion of water and electrolytes, and of glucose and ketone bodies also. The cumulative effect of such metabolic adaptations, especially when they are superimposed upon the effects produced by rebellious behavior, may be that of precipitating a rapid decompensation of diabetes. Less pronounced metabolic adaptations, occurring over a period of time as the patient adapts to changing demands of his occupation and of his personal life, account for many otherwise unexplained variations in insulin requirement.

The situations to which the diabetic patient responds with metabolic changes appear to have a high degree of specificity for the individual. Thus, it is not uncommon to see a patient occasionally pass through what appear to be major crises in his life with relatively little disturbance in the course of his disease, and later respond to a superficially innocuous event with a major metabolic upheaval. When these events are studied in relation to their pertinence for the patient, often the apparently in-

nocuous situation is found to have been highly threatening to him, while the situation which appeared to be threatening was much less so. By and large, it may be said that the life situations to which patients respond with metabolic changes leading to ketosis are acute conflicts with significant individuals in their lives, usually parents, husbands, wives, or children, or the threatened loss of such a significant person. Situations extending over a period of time and engendering feelings of loneliness, dejection, and chronic resentment are often associated with a relative increase in insulin requirement. These situations also usually center around important members of the family, but sometimes they are related to occupation or finances. Conversely, life situations to which the patient responds with feelings of contentment, security, and relative freedom from care, may be associated with a relative diminution of insulin requirements. Sometimes "excitement," such as experienced during a rapid automobile ride, or during sexual stimulation, may be associated with hypoglycemic reactions.

All of these metabolic fluctuations occur more frequently and to a greater degree in younger and more labile patients, and are especially a feature of so-called "brittle" diabetes. In older, more obese patients, with more stable diabetes, similar metabolic changes can be shown to occur; but their magnitude is relatively smaller, and their influence upon the course of the illness is correspondingly less. When a relatively obese or stable diabetic develops a rapid and marked change in his insulin requirement, this should not be attributed to a metabolic reaction to his life situation except when the situation is a highly potent one, and no other explanation for the decompensation of the diabetes can be found.

The management of diabetes, therefore, is dependent upon the physician's seeing his patient in context. It is not enough to view the person with diabetes simply as a sort of living test tube, in which the proper mixture of diet, insulin, and activity, will always produce the proper degree of regulation, if no other illness is present. It is necessary to view him as a sentient, active member of his society, constantly interrelating with and adapting to his family, his associates, his job, and all of the complex events and situations of the world around him. It is essential to know that his adaptations to his daily life constantly influence the course of his illness. The physician cannot always alter his patient's environment or his reaction to it; but he can at least attempt to understand it. Understanding it, he can take it into account in his management of the illness.

LAWRENCE E. HINKLE, JR., M.D.

The New York Hospital, New York, New York