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POSTGRADUATE COURSES

The major objective of the American Diabetes Association is to bring about a clearer understanding of diabetes so that patients may experience a minimum of difficulty and discomfort. Continuing investigations in the various research centers are yielding important new information bearing on the cause, pathological physiology, clinical manifestations, complications, new methods of therapy, and prevention of diabetes. The health of the future diabetic depends on the researches of today. A large amount of important knowledge has been gained in the last quarter century. Much of this has not yet found its way into the daily routine practice of physicians who represent the shock troops in the battle for better diabetes control.

While research is being encouraged and supported at various centers, it is important that the deliberations of authorities in the basic sciences and at the clinical level be given adequate presentation and interpretation. It is self-evident that the better the understanding on the part of the physician and the more intelligent and cooperative his patient, the more satisfactory will be the results. Education then, follows research as an important principle for diabetes control.

The American Diabetes Association is an organization made up of basic scientists and clinicians whose interests include research, the care of patients, and education of the profession and public at large.

The policies of the Association deal with encouragement of research and an expansion of training programs. Through its Journal DIABETES the various areas of research in nutrition, metabolism, endocrine disorders and associated fields are given scope for expression. The Journal is filling an important need of medical science, as is demonstrated by the increase in its circulation. Many of its papers are derived from the annual spring meeting of the Association which furnishes an opportunity for investigators to present their findings to the membership of the Association.

A few years ago the Council of the Association appointed a committee on Postgraduate Courses. Two courses have already been given with gratifying success —the first at Toronto in January 1953 and the second at the Mayo Clinic in Rochester, Minnesota, in January 1954. The third Postgraduate Course will be given January 19-21, 1955, at The Lankenau Hospital in Philadelphia. The first two courses were oversubscribed and unfortunately not all those desiring to enroll could be accommodated. It is the policy of the Association to give preference to those applicants who were not accepted for the preceding courses and who desire to enroll in the next following course.

While the courses were in progress, members of the class were requested to give their frank comments regarding topics, speakers, the scope of the course and any other pertinent information they desired to offer. This has resulted in a considerable number of exceedingly helpful comments. Some of them refer to omissions in subject matter. For example, requests have been made several times for a discussion of "The Elderly Diabetic"; others requested a discussion on "The Treatment of Dia-

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The report from Dr. H. S. Everett of St. Stephen, New Brunswick, Canada, contained both praise and constructive criticism. Ed.

A general practitioner looks back on the Second Annual Postgraduate Course. What a stimulating experience and what a privilege to meet and listen to the great and near-great in the diabetic world. Excellent papers, ably presented, good fellowship and hospitality from all I met. The general high plane of the whole meeting made it a very memorable experience and one I hope to repeat at Philadelphia next year.

I was somewhat perturbed, however, by the attitude of some of the speakers towards the use of insulin, namely, that one must be very careful and that severe or even mild reactions are very much to be dreaded, much more so than brick tests of the urine. Also that absolute control of diabetes was a goal that could only be attained in a few special cases and in fact wasn't even a goal. . . . I must confess that for the last twenty years, during which time I have successfully treated many diabetics, I have made absolute control the goal for all. . . . Naturally, I have tried to avoid severe reactions but I have never worried about them when they did occur nor have I seen any harm come from them and I have seen some very severe reactions in labile diabetics. . . .

I throw a challenge to the specialists in diabetic care and treatment. Are you giving us general practitioners and the millions of diabetics on this continent and in the world the proper lead in this most important question?

betes in Association with Other Diseases." Some applicants requested a four-day rather than a three-day course. There was also the usual and important comment that speakers should not use slides containing a large mass of fine print that the audience could in no way encompass. The Committee was impressed with the suggestions concerning intermediary metabolism, nutrition and dietetics, a larger consideration of the liver and the blood in association with diabetes, and request for a discussion on normal metabolism of carbohydrates, proteins, and fats. A number of those attending the course requested that printed summaries of each presentation be furnished before the course was given. This entails a great amount of detail in preparation and often is difficult to accomplish.

From a report submitted by a general practitioner in St. Stephen, in New Brunswick, the Committee was much impressed by the awareness of the practicing physician of the need for a higher standard of treatment for diabetes and the desire to learn how to maintain the best possible control. (See footnote page 250.)

For the Third Postgraduate Course which will be held in Philadelphia next January, the Committee has conferred with a number of authorities of the various medical faculties in Philadelphia. It has also requested suggestions from members of the Council of the Association and has carefully reviewed the comments of those in attendance at the two previous courses. From this information the Committee will endeavor to organize a course which will be offered next January that will emphasize normal nutrition, the pathological physiology of diabetes, the diabetic child, the elderly diabetic, new data on the origin of complications, new approaches to diet planning, and certain other highlights bearing on diabetes. The Committee hopes to offer three clinics with presentation of patients.

It has been recognized that the presentation of new data in each course is essential rather than a review of material and information which already is the common knowledge of the alert modern physician.

EDWARD L. BORTZ, M.D., Philadelphia.

THE RAPID INTRAVENOUS GLUCOSE TOLERANCE TEST

Amatuzio and his associates[1] have developed a rapid and practical modification of the intravenous glucose tolerance test.[2] Twenty five grams of glucose, as a 30 per cent solution in distilled water, are administered intravenously in four minutes. Blood samples are obtained for sugar determinations immediately before, immediately after completion of the glucose infusion, and thereafter every 8 minutes for 64 minutes. A capillary blood sugar method is used. The loss of glucose in the urine is relatively insignificant during the one-hour period of the test and even in diabetics does not exceed 10 per cent of the amount administered. When the logarithm of the amount of glucose in excess of the fasting blood glucose ("glucose excess") is plotted on semilog graph paper against the time in minutes, a straight line relationship is obtained, from which the disappearance rate of glucose from the blood may be obtained either by graphic means or by calculation. A highly significant difference between normal individuals, mild diabetics, and severe diabetics could be established for the rate of glucose disappearance, expressed as per cent per minute. With diabetes, glucose disappearance rates were uniformly lower than normal. As might be expected, various conditions including obesity, inflammatory disease, uremia, carbohydrate starvation and decompensated portal cirrhosis also revealed a decreased rate of glucose disappearance. The rate of fall of the "excess glucose" depends upon both peripheral utilization of glucose and its storage in the form of liver glycogen. Like other tests the one described in no way differentiates disturbances in storage from those of utilization.

The advantage of this test over oral tests (shared with other intravenous tests) is that changes in gastrointestinal motility and rate of absorption do not influence the results. This test has definite advantages over other types of intravenous testing, such as that developed by Thorn and his associates,[3] in that it is less time consuming and the results are relatively independent of the dosage of glucose administered for doses of 25 gm. or more. Another advantage of this test is that any blood sugar method may be used, even those that do not determine true blood glucose. The authors have shown that nonfermentable reducing substances remain constant during the test. Since the error in blood glucose determination is constant and the results are expressed as differences in blood sugar levels, the conclusions of the test are independent of the method used for determination of blood sugar. The test appears to have an excellent reproducibility in the same individual at different times.

The linear nature of the curve indicates that the process of removal of glucose from the blood is governed by the laws of unimolecular reactions, where the rate of reaction varies with the concentration of the reactant. Such conditions would be met if all the mechanisms for removal of glucose from the blood involved diffusion into the intracellular environment,