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LEUMERY Paul, Histoire illustrée du diabete de l'antiquité a nos jours, Editions Roger Dacosta, Paris, 1987, pp. 255

The history of diabetes is one of the most fascinating, as its elusive nature has occupied men of science for centuries, leading to fundamental discoveries in the field of physiology, biochemistry and theraphy. Many famous researchers have contributed to the achievements made in the treatment and understanding of diabetes, up to the latest developments in the field of bioengineering with the production of human insulin.

Dr. Leuméry has traced the story of the discoveries and hypotheses made in the study of diabetes through the ages and has produced a work which will interest both the layman and the expert.

Diabetes is a disease which, although well known to mankind for centuries, remained unexplained and incurable in its more serious form until this century. Even in documents of ancient India we find references to a condition termed *urine of honey* which was probably what we now know as diabetes mellitus.

The word *diabetes* is derived from the Greek *diabos*, meaning *pass through*, owing to the fact that the liquids consumed by the patient appeared to pass through the body without being absorbed. The symptoms of the disease were well know in ancient Greece and were described by Aretaeus of Cappadocia in his treatise on Causes and Indications of Acute and Chronic Disease. The most obvious symptoms were those of polyurea and polydypsia, the former being attributed by the ancients to a *liquefaction* of the flesh, which was held to pass out of the body in the urine, leading to weight loss and fatigue. According to Galen, it was a disease of the kidneys, which were unable to hold all the liquids consumed by the patient and so eliminated them unchanged via the bladder.

The beginning of the era of biochemistry marked the first important steps forward in the understanding of the syndrome.

In 1674 the sweet taste in the urine of diabetics was noted by Thomas Willis in his work *Pharmaceutica rationalis*. To Willis we also owe the division of the disease into diabetes mellitus (termed diabetes anglicus by Willis) and diabetes insipidus, a distinction which is still valid today.

Dobson (1776) demonstrated chemically the presence of sugar in the urine and in 1797 Rollo emphasised the metabolic nature of the disease and attempted to treat his patients with special diets.

More progress was made in the nineteenth century, from the identification of the sugar in the urine as glucose by Chevreul to the discovery of the glycogenic function of the liver by the renowned physiologist Claude Bernard in 1856, and the discovery of the pancreatic islets by Langerhans.

Bouchardat, who attributed the condition to an excessively glycogenic diet leading to an excess of glucose in the blood, also stressed the importance of diet and provided insights into some important chronic complications, such as retinopathy and nephropathy, which probably remain the most dreaded aspects of diabetes.

With Lanceraux we come nearer to the truth with his observations on the pancreatic origin of the disease, and this leads eventually to the famous experiments carried out by Minkowski and Von Mering in 1889, who while studying the effects of the removal of the pancreas in dogs, discovered that pancreatectomy always caused a serious form of diabetes.

Researchers in various parts of the world all made their contributions great or small to the deeper knowledge of the subject, until the exciting moment of the discovery of insulin by Banting and Best in 1921. This was a turning point in the history of diabetes, and Dr. Leuméry writes about the first patient to receive insulin injections and of the sufferings of the patients who before the discovery of insulin were destined to die within a short time after the onset of the disease.

The last chapters describe some of the latest developments in treatment, the introduction of oral hypoglycaemic drugs, in-

sulin pumps and patient training programmes. The author also points to possible future developments, the possibility of islet tranplantation and of some progress in understanding the pathogenesis of the disease, which is still not clear.

Leuméry gives a very thorough account of all the attempts made in the past to solve the problem of diabetes, including the experiments which did not succeed and those which could not suceed because the necessary resources were not yet available. It must be admitted that some of the numerous names he quotes are of minor importance as regards their achievements. However, this is a small defect in an otherwise splendid volume.

This book, with its fine illustrations, while accessible to the general public, at the same time offers an accurate history and well documented study of diabetes, based on a sound scientific knowledge of the subject.

Pauline Webber