

pancreas was a byword in the medical world for many decades.

One of the anatomists to make classical contributions concerning the structure of the pancreas was our contemporary, Professor Richard R. Bensley. Bensley clarified to a large extent the relation of the islets of Langerhans to the ducts of the pancreas, the independence of the islets from acinar tissue, and the cell types in the islets. It has been said that Banting expressed great appreciation of the work described in Bensley's Harvey Lecture on the pancreas. In personal letters recently received from Russell M. Wilder and from Charles H. Best, both paid further tribute to Bensley. As I write, Professor Bensley has reached his eighty-fourth year, so let us honor the octogenarians in medicine as well as

the medical students.

There are many more links in the chain of medical history that binds the period of Langerhans and the period of Best. Only a few of them could be mentioned in this brief sketch of the life of Paul Langerhans, but these few that I have noted are basic. They will stand for all time, linking the past with the present, and the future that is to come.

#### REFERENCES

- <sup>1</sup>Morrison, H.: Paul Langerhans; Contributions to the Microscopic Anatomy of the Pancreas (Berlin 1869). Bull. Hist. Med. 5: Mar. 1937.  
<sup>2</sup>Houssay, B.A.: The Discovery of Pancreatic Diabetes. Diabetes 1:112-16, March-April 1952.  
<sup>3</sup>Langerhans, Paul: Inaugural Dissertation, Univ. of Berlin 1869.

## BOOK REVIEW

DIABETES AND PREGNANCY. *Blood Sugar of Newborn Infants during Fasting and Glucose Administration*. By Jorgen Pedersen, M.D. No Price indicated. Paper. Pp. 230. Illustrated. Danish Science Press Ltd. Copenhagen, 1952.

This monograph presents a detailed summary of extensive and well-planned studies done in a lying-in hospital, Copenhagen, Denmark. It deals with carbohydrate metabolism during pregnancy in diabetic and nondiabetic women and with carbohydrate metabolism in their infants. The first chapter reviews current knowledge of carbohydrate metabolism in mammalian fetuses and newborn young. Subsequent chapters present an extensive review of previous investigations regarding carbohydrate metabolism in infants of nondiabetic and diabetic mothers, maternal blood sugar and blood sugar of infants of diabetic and nondiabetic mothers at birth, in the first 24 hours of life and during later neonatal periods, and to theories previously advanced regarding homeostatic mechanisms of control.

The writer's own investigations are summarized in chapters dealing with blood sugar levels in the mothers, with regard to duration and treatment of their diabetes (including complications), blood sugar levels in the infants of diabetic and nondiabetic mothers in the first 24 hours and later neonatal periods, in relation to sex, birth, weight, gestation time, maternal anesthesia, cyanosis at birth and after, maternal insulin dosage, responses to oral glucose tolerance tests.

Some salient findings emphasized in the author's sum-

mary are as follows: 1. During the first 24 hours of life, the course of the blood sugar curve was, in general, the same in infants of diabetic and nondiabetic mothers when the infants were kept under standard conditions; 2. Infants of diabetic as well as nondiabetic mothers withstood fasting 24 hours without exhibiting any constant decrease in blood sugar; 3. During the first 24 hours, there was a negative correlation between the mean blood sugar of the infant and the maternal mean blood sugar during the latter months of pregnancy; 4. The infants blood sugar varied also with the birth weight; this correlation being negative among the infants of diabetic and positive among those of nondiabetic mothers; 5. The mean blood sugar was subject to wide variations, in infants of both diabetic and nondiabetic mothers; 6. No correlation was found between symptoms, such as cyanosis during the neonatal period and the infants' blood sugar; 7. Oral glucose tolerance tests during the first eight days of life were variable in both infants of diabetic and of nondiabetic mothers.

In a final chapter the writer discusses hypotheses regarding blood sugar regulations in newborn infants, including the homeostatic liver mechanism, without stating very definite conclusions but supporting as plausible the old hypothesis that maternal hyperglycemia in the pregnant diabetic may lead to fetal islet cell hypertrophy. An excellent bibliography includes 188 references.