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Henry B. Mulholland, M.D.

1892-1966

Charles H. Best, M.D., Toronto

Henry Bearden Mulholland, long a distinguished member of the Medical Faculty of the University of Virginia, died in Charlottesville on Oct. 30, 1966, at the age of seventy-four, after a relatively short illness. As a teacher and physician his sound and sympathetic judgment was never-failing and he was loved and respected by students and associates alike. Not only did

he make a deep impression on his colleagues in the University—his advice was sought and respected, also, by the various medical groups to which he gave so sparingly of his time and energy. It is not possible to mention all of these societies by name but he served with distinction in the American Medical Association where, as Chairman of the Committee on Aging and as a member of its Council on various medical services, his efforts concerning geriatrics in general were of far-reaching importance. He was instrumental, also, in organizing the Virginia Council of Health and Medical Care and, from the time of its inception in 1946, he served the Council with unfailing wisdom—first as Chairman and subsequently in other capacities. He was a member of the Board of Trustees at the time of his death. To the U.S. Public Health Service he gave invaluable assistance in an advisory capacity concerning arthritis, metabolic diseases, aging, etc.

My own friendship with "Hank" Mulholland stemmed from the early days of the American Diabetes Association. His special interest in diabetes was apparent from the earliest days of his practice. In the '20's he spent several months' extensive training in this disorder at the New England Deaconess Hospital in Boston, and later continued his studies abroad. His sympathetic consideration of the problems of diabetics everywhere won him the admiration and affection of all his colleagues in the American Diabetes Association. His extremely sound judgment and his loyalty to the interests and aims of the Association at all times contributed immeasurably to the development of the organization and the expansion of its work. In 1955 he was elected President of the ADA and was the recipient of the Banting Medal, the Association's highest honor for scientific achievement. Lay groups to which he lectured throughout the country knew him well also, and his warm and kindly approach endeared him to diabetics and their families everywhere. Many such groups had the pleasure of honoring him in special ways. In 1965 the Piedmont

Area Lay Society of the Virginia Diabetes Association elected him to special membership in gratitude for his never-failing sound advice and constant help.

For more than forty years he was one of the most respected and beloved members of the medical community of Virginia and brought honor and distinction to the University and Hospital to which he gave such loyal and devoted service. His accomplishments in scholastic and medical fields were rewarded by many expressions of admiration and affection. In 1961, the year before his retirement, the University of Virginia endowed a Chair in his name. He was the first incumbent. During that same year he received the Thomas Jefferson Award of the University as the member of the Faculty who had brought the greatest honor to the University through his work. In 1966 the American College of Physicians conferred a mastership upon him

—the highest honor that College can bestow upon a member.

Henry Mulholland was born in Knoxville, Tennessee, on Jan. 9, 1892. It gives me great pleasure to recall, however, that he spent some of his formative years in Toronto as his father was Canadian and, before returning to the United States, he had studied for two years at the University of Toronto. It was in 1917 that he enrolled at the University of Virginia as a medical student and from that date began his long and productive association with the University which meant so much to him throughout the years to follow.

Those of us who were fortunate in his friendship feel his loss most keenly. We extend our heartfelt sympathy to his devoted wife, Elizabeth, to his daughter, Mrs. Charles Gregg, and to his son, Dr. John Henry Mulholland.

ABSTRACTS

Ailabouni, H.; Dikstein, S.; Zor, U.; and Sulman, F. G. (Dept. Applied Pharmacol., Sch. of Pharmacy, Hebrew Univ., Jerusalem, Israel): SPECIFICITY OF THE "TIBIA TEST" IN INTACT IMMATURE FEMALE RATS. *J. Endocr.* 35:393-99, August 1966.

Growth hormone preparations can be assayed by their effect on the growth of epiphyseal tibial cartilage in immature female rats. However, various other hormones have been reported to exert an influence in this bioassay system. In the present study, the relative effect of various substances has been compared. Hydrocortisone caused a slight inhibition of cartilage growth at a dose level of 10 mg./kg./24 hrs. and exerted a marked effect at 40 mg./kg./24 hrs. The width of tibial epiphyseal cartilage was increased by the following compounds in the amounts indicated (per kilogram body weight per day): 0.5 mg. of growth hormone, 10 U. Ultralente insulin, 5 mg. of testosterone hemisuccinate in oil, 0.1 mg. of L-thyroxine sodium, 0.03 mg. of L-triiodothyronine sodium, and 0.2 mg. of aldosterone. Dehydroepiandrosterone and prolactin did not affect cartilage growth under the conditions tested.

H.T.N.

Alexander, D. Pauline; Britton, H. G.; and Nixon, D. A. (Physiol. Dept., St. Mary's Hosp. Med. Sch., London, England): OBSERVATIONS ON THE ISOLATED FOETAL SHEEP WITH PARTICULAR REFERENCE TO THE METABOLISM OF GLUCOSE AND FRUCTOSE. *J. Physiol.* 185:382-99, July 1966.

Fetal blood of sheep contains substantial quantities of fructose, but the role of this sugar in fetal metabolism is obscure. Sheep fetuses of seventy-two to 146 days' conceptual age were isolated and maintained by perfusion with oxygenated blood. Young fetuses apparently depend upon a constant supply of glucose from the maternal circulation. The concentration of circulating glucose gradually declined in isolated fetuses; the

amount disappearing was approximately equivalent to oxygen consumption. Older fetuses are known to have larger supplies of liver glycogen, and they were able to maintain blood sugar better after isolation. Fructose was removed from the circulation only slowly and half of the amount that disappeared could be accounted for by renal excretion. H.T.N.

Appleman, M. Michael; Krebs, Edwin G.; and Fischer, Edmond H. (Dept. of Biochem., Univ. of Washington, Seattle, Wash.): PURIFICATION AND PROPERTIES OF INACTIVE LIVER PHOSPHORYLASE. *Biochemistry* 5:2101-07, June 1966.

The inactive form of glycogen phosphorylase has been purified from pig liver. The method involves differential centrifugation of the enzyme while it is bound to endogenous glycogen particles, solubilization with α -amylase, precipitation with ammonium sulfate, and column chromatography on DEAE-cellulose. The purified enzyme appears homogeneous in the ultracentrifuge. The enzyme can be assayed because it displays catalytic activity in the presence of a high concentration of salt. Pig liver phosphorylase contains 1.2 moles of pyridoxal 5'-phosphate per 100,000 gm. of protein and incorporates 2 moles of phosphate per 100,000 gm. when converted to the active form by muscle phosphorylase β kinase and ATP. H.T.N.

Balodimos, Marios C.; and Hurxthal, Lewis M. (Lahey Clin. Foundation, Boston, Mass.): THE REMOTE PREDIABETIC STATE. EFFECT ON INFANT SIZE, FETAL AND PERINATAL MORTALITY. *Geriatrics* 21:119-27, September 1966.

Obstetric histories are reviewed of 130 women who were tested for diabetes sixteen to sixty-five years after their last pregnancy by a glucose tolerance test. A higher prevalence of multiple large infants at birth and more than one obstetrical