Healio Cardiology today

FEATURE

A tribute to Peter O. Kwiterovich Jr., MD

September 11, 2014

By Roger S. Blumenthal, MD; and Michael Miller, MD

The field of preventive cardiology lost one of its great investigators, clinicians and mentors with the passing of **Peter O. Kwiterovich Jr., MD,** on Aug. 15. He died after a long battle with metastatic prostate cancer at age 74 years.

Affectionately known as "Pete" to his many friends and colleagues in academic medicine, he was an internationally known expert on atherosclerotic vascular disease. He was the founder and director of the Johns Hopkins University Lipid Clinic. His investigative and clinical work spanned more than 45 years and defined what was considered normal cholesterol values for children. He also helped demonstrate the safety of statin therapy in adolescents with familial hypercholesterolemia. His research helped to avert premature disability and death for thousands of individuals with inherited dyslipidemias.

Peter O. Kwiterovich Jr.*

His work shaped our current approach to screening and CVD prevention, and led to a better understanding of the evolution of atherosclerotic vascular disease from adolescence onward. The way that Kwiterovich set up the Lipid Clinic with a strong focus on lifestyle changes for the entire family was how we modeled the University of Maryland Preventive Cardiology Center and the Johns Hopkins Ciccarone Center for the Prevention of Heart Disease. He greatly enjoyed teaching several generations of students, house staff, fellows, patients and their families. He loved science and became a full professor at Johns Hopkins at age 44 years.

The son of a physician, Kwiterovich was exposed to science as a child. He graduated from the College of Holy Cross, and his interest in genetics was nurtured at Dartmouth Medical School and at Johns Hopkins School of Medicine under the direction of the late **Victor McKusick, MD,** who is often referred to as the father of medical genetics.

Roger S. Blumenthal

Kwiterovich completed his internship in pediatrics at Harvard's Children's Hospital and then worked for 3 years in the molecular disease branch at the NHLBI. It was at the NIH where he developed a passion for understanding and treating inherited disorders of cholesterol metabolism and also where he worked with **Donald Fredrickson, MD,** and **Robert Levy, MD,** on the metabolic basis of atherosclerotic vascular disease. He then completed his pediatrics residency at Johns Hopkins. Soon after, he received research funding from the NIH that allowed him to establish the Johns Hopkins University Lipid Clinic, which he directed until this past spring. His group often saw more than 2,000 pediatric and adult patients each year. The Johns Hopkins site he directed was selected to participate in the landmark Lipid Research Clinics Coronary Primary Prevention Trial, the first clinical trial demonstrating that cholesterol lowering using a bile acid sequestrant was associated with reduced risk for an initial CHD event.

In 1973, Kwiterovich wrote a seminal paper in *The Lancet*, titled "Neonatal Diagnosis of Familial Type-II Hyperlipoproteinemia," which was cited by Brown and Goldstein in their Nobel Laureate manuscript published in *Science* in 1986.

Beginning in the late 1970s, Kwiterovich teamed up with **Allan Sniderman, MD,** after their discovery that apolipoprotein B was a better predictor of CHD risk than LDL cholesterol. In fact, Kwiterovich and Sniderman were among the first to identify increased CHD risk in association with relatively normal levels of LDL, if ApoB levels were elevated. Known as "hyperapoB," this disorder has become increasingly recognized as an important contributor to increased CHD risk in young and middle-aged individuals.

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