



# Harold David Levine



Harold David Levine was born in Boston on Oct. 25, 1907, and died on April 8, 1993 at the age of 86. He attended Brookline High School. He later entered Harvard Medical School, from where he graduated in 1932. He prepared for general practice in a rigorous way. In 1932, he took a year-long internship in pathology at Beth Israel Hospital. From 1933 to 1935, he served as an intern and assistant resident in medicine at Peter Bent Brigham Hospital. His formal training completed, he spent the next six years engaged in general practice in Bristol, N.H. However, he was clearly interested in cardiology, and, for a time in 1938, was a special student in cardiovascular roentgenology at Temple University in Philadelphia.

Dr. Levine served with the Harvard Medical Unit in World War II from 1942 to 1945, first in Australia, and then in New Guinea and the Philippines. He advanced from major to lieutenant colonel, becoming chief of medicine of the 35th General Hospital.

At the end of the war, Dr. Levine returned to private practice in Boston with privileges at Peter Bent Brigham and Deaconess hospitals. Also at this time, his uncle, Samuel A. Levine, arranged for him to be a special student of his close friend, Frank N. Wilson, at the University of Michigan Hospital in Ann Arbor. Dr. Wilson was generally considered to be the leading electrocardiographer in the country, if not the world. At the Brigham, he received superb clinical training in cardiology from his uncle, Dr. Levine, who, along with Paul White at Massachusetts General Hospital, was a leading cardiologist of that era. Thus, Harold Levine brought to his patients and students a unique and exceptionally broad background of knowledge of internal medicine, pathology, radiology, electrocardiography and cardiology.

He soon became the leading expert at Peter Bent Brigham Hospital in the emerging discipline of electrocardiography. For three decades, he interpreted thousands of tracings and taught their meaning to generations of house officers, students and fellows. He spent each morning both in caring for his hospitalized patients and interpreting electrocardiograms, and every afternoon in his private office where

he had a large cardiology practice—he was widely sought after as a consultant.

The commitment of Harold Levine to scholarship and the pursuit of new knowledge was extraordinary, particularly for an individual with a busy and demanding set of practice responsibilities. During his career, he published 87 papers, many of which were on the frontiers of cardiology, and all of which characterize his unique clinical perceptiveness.

His first 14 papers between 1932 and 1943 were largely those of a general practitioner: epidemic pleurodynia, cardiac hypertrophy in infants with coarctation of the aorta, urticaria due to cold sensitivity, fatality following bismarsen therapy, herpes epidemic, and folk medicine in New Hampshire. He also found time for electrocardiographic studies of lead IV of normal rabbits and rabbits with viral myocarditis.

While in the U.S. Army Medical Corps, he published papers on a range of different topics, including the cardiac complications and the pathological changes in the heart in scrub typhus, rheumatic heart disease among 200 native Papuans, effect of Atabrine on the EKG, diagnostic value of sternal puncture in malaria and the innocuousness of hookworm infestation.

In his early Brigham years (1948-1950), he began to demonstrate his unusual and lifelong ability to suggest collaborative studies with colleagues who had special equipment and methods. Thus he described the intracardiac electrogram of the right atrium, right ventricle and coronary sinus, and localization of the cardiac pacemaker using a wire threaded through a cardiac catheter.

Between 1951 and 1970, he published 49 papers on a wide variety of topics. With the advent of the 12-lead electrocardiogram, he correlated the tracings with pathological changes in the heart of 150 autopsied cases. Later, he appraised the vectorcardiogram in normal patients and in those with myocardial infarction. He described changes in the electrocardiogram in such metabolic disturbances as hyperkalemia and hypokalemia. Addison's disease, and anoxic arrest during and after cardiac surgery. He described paroxysmal atrial tachycardia with block due to digitalis overdosage. He engaged in pharmacological studies, noting electrocardiographic effects of various drugs. His last paper in 1985 was entitled "Subendocardial Infarction." This was a classic perspective, complete with color photographs.

Dr. Levine progressed up the academic ladder, eventually becoming clinical professor of medicine at Harvard Medical School and physician at Peter Bent Brigham Hospital. He did not retire from practice until 1989.

Over the years, Dr. Levine was active in the American Heart Association in several capacities. He was a founding fellow of the Council on Clinical Cardiology in 1952, and was one of its representatives to the AHA's board of directors. He was a leader in the Massachusetts affiliate of the American Heart

Association, serving as president of the Greater Boston Chapter in 1954-55, and president of the Massachusetts affiliate in 1966-67. He also was president of the New England Cardiovascular Society in 1961, and for many years was a member of its advisory committee, which was responding for selecting and organizing its scientific programs. For all of these activities, he received the American Heart Association's prestigious Distinguished Service Award in 1979.

Harold Levine was a humble and gentle man, in both sense of the word gentle. He was greatly admired and respected by his many students and colleagues. He practiced the highest standard of medicine's art and science, and was devoted to his patients as they were to him. Family and Judaism were of vital importance in his life, and travel was one of his few diversions. Medicine was all-absorbing to him. He followed the Osler tradition inculcated into him in his years of training under Henry Christian, himself an Osler trainee. He survived cancer of the colon for 10 years, dying at the age of 86 of pneumonia.

He leaves his lovely and devoted wife, Barbara; two sons, Jeffrey E. of Springfield, Vt., and Jonathan A. of Jamaica Plain; a sister, Dorothy Brown; and a brother, Julian, both of Brookline.

For those fortunate patients and colleagues who knew him well, his absence is sorely felt. He had been a cornerstone of Brigham and Women's Hospital and of the community for so very long.

Submitted to the faculty of Harvard Medical School by the following committee:

Respectfully submitted,

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