CIRCULATION
AN OFFICIAL JOURNAL OF THE AMERICAN HEART ASSOCIATION

EDITOR-IN-CHIEF
Howard B. Burchell, Rochester, Minn.

ASSISTANT EDITOR
M. Katharine Smith, Rochester, Minn.

ASSOCIATE EDITORS
Patrick A. Ongley, Rochester, Minn.
Ralph E. Smith, Rochester, Minn.

EDITORIAL BOARD

E. Cowles Andrus, Baltimore, Md.
Richard J. Bing, Detroit, Mich.
Stanley E. Bradley, New York, N. Y.
Daniel A. Brody, Memphis, Tenn.
J. Scott Butterworth, New York, N. Y.
Jefferson M. Crismon, Stanford, Calif.
Michael E. DeBakey, Houston, Texas
Victor G. de Wolfe, Cleveland, Ohio
Albert Dorfman, Chicago, Ill.
James W. DuShane, Rochester, Minn.
Jesse E. Edwards, St. Paul, Minn.
Mary Allen Engle, New York, N. Y.
Frederick H. Epstein, Ann Arbor, Mich.
M. Irené Ferrer, New York, N. Y.
Alfred P. Fishman, New York, N. Y.
Edward D. Freis, Washington, D. C.
Robert H. Furman, Oklahoma City, Okla.
David C. Greene, Buffalo, N. Y.
Robert E. Gross, Boston, Mass.
Hans H. Hecht, Chicago, Ill.
John B. Hickam, Indianapolis, Ind.
Edgar A. Hines, Jr., Oteen, N. C.
J. Willis Hurst, Atlanta, Ga.
Thomas N. James, Detroit, Mich.
Louis N. Katz, Chicago, Ill.
Aaron Kellner, New York, N. Y.
Charles E. Koosmann, New York, N. Y.
Edward C. Lambert, Buffalo, N. Y.
John H. Larach, New York, N. Y.
Maurice Levy, Chicago, Ill.
Howard P. Lewis, Portland, Ore.
Arthur J. Linenthal, Boston, Mass.
Victor A. McKusick, Baltimore, Md.
Gordon K. Moe, Utica, N. Y.
Andrew G. Morrow, Bethesda, Md.
David F. Opdyke, Jersey City, N. J.
Charles A. Owen, Jr., Rochester, Minn.
Raymond D. Pruitt, Houston, Texas
T. Joseph Reeves, Birmingham, Ala.
Dickinson W. Richards, New York, N. Y.
John Ross, Jr., Bethesda, Md.
Abraham M. Rudolph, San Francisco, Calif.
David C. Sabiston, Jr., Durham, N. C.
John T. Shepherd, Rochester, Minn.
Mendel C. Sheps, New York, N. Y.
Madison S. Spech, Durham, N. C.
Howard B. Sprague, Cambridge, Mass.
James V. Warren, Columbus, Ohio
William B. Wartman, Chicago, Ill.
Stanford Wessler, St. Louis, Mo.
Park W. Willis III, Ann Arbor, Mich.
Earl H. Wood, Rochester, Minn.
Paul M. Zoll, Boston, Mass.

CONSULTING EDITOR: Herrman L. Blumgart, Boston, Mass.

PUBLICATIONS COMMITTEE, AMERICAN HEART ASSOCIATION

Eugene Braunwald, Chairman

Crawford W. Adams, Bethesda, Md.
New York, N. Y.
Robert H. Furman, Oklahoma City, Okla.
Edward S. Orgain, Durham, N. C.

Charles A. R. Connor, New York, N. Y.

Erwin H. Mosbach, New York, N. Y.

Walter H. Pritchard, Cleveland, Ohio

W. Jafe Taylor, Gainesville, Fla.

Julius H. Comroe, Jr., San Francisco, Calif.

ii
have added new information about the cardiovascular system of the patient that should contribute to our diagnostic armament. Perhaps we cannot yet interpret this finding explicitly, but we should wonder what factors in that patient tend to favor persistence of a nonlaminar type of flow.

A. C. Burton

References


History of Clinical Blood Pressure Estimations

In 1903 Harvey Cushing suggested the addition of blood pressure measurements to the fever chart that had been introduced by Wunderlich in 1868. . . . Although many methods had been proposed for the indirect measurement of blood pressure, at the time of Cushing's recommendation there was no practical and reliable method for clinical use. The methods generally available originated with Marey's observations of the blanching of an arm enclosed in a fluid-filled glass chamber. . . .

The occluding cuff technique, introduced almost simultaneously by Riva-Rocci (1896) in Italy and Hill and Barnard (1897) in England, provided a convenient method of occluding the brachial artery and obtaining systolic blood pressure. Palpation of the radial artery while releasing cuff pressure from a level above assumed systolic pressure permitted reading systolic pressure when the radial pulse could be felt. . . . Korotkoff's complete paper (1905) was presented at a meeting of the Imperial Military Medical Academy. As published, it occupied less than half of one page. The discussion which followed required considerably more space and from the translation which follows, it is obvious that a few in the audience were willing to accept so obvious a phenomenon. A few believed that the sounds were heart sounds which appeared when the artery opened, permitting a communication between the heart and the stethoscope. Korotkoff had his own views on this belief. Others merely wanted an accurate explanation for the phenomenon, which of course was not available at the time, nor even at present.—L. A. Geddes, H. E. Hoff, and A. S. Badger: Introduction of the Auscultatory Method of Measuring Blood Pressure—Including a Translation of Korotkoff's Original Paper. Cardiov Res Cent Bull Baylor U Coll Med 5: 57, 1966.
A Refreshing Opinion

The ballast of factual information, so far from being just about to sink us, is growing daily less. The factual burden of a science varies inversely with its degree of maturity. As a science advances, particular facts are comprehended within, and therefore in a sense annihilated by, general statements of steadily increasing explanatory power and compass—whereupon the facts need no longer be known explicitly, i.e. spelled out and kept in mind. In all sciences we are being progressively relieved of the burden of singular instances, the tyranny of the particular. We need no longer record the fall of every apple.—P. B. Medawar: The Art of the Soluble. London, Methuen & Co. Ltd., 1967, p. 114; also distributed by Barnes & Noble, Inc., New York.


Biologic Determinism

It is not only in their evolution but in their growth and persistence from day to day that organisms have been said to be wildly improbable phenomena. By this is meant, I suppose, that if all the ingredients of the world or the solar system were to be shaken up in a dice box of divine dimensions, the emergence from it of a configuration like an earthworm would be most improbable. How very true! But in the physical circumstances that actually prevail, the growth and maintenance of an organism is the most probable outcome of the events it is taking part in. When I eat a meal, for example, I expect part of it to turn into more of myself. In particular, I shall expect some of it to turn into the chemical substance characteristic of my own blood group, group B. So very highly probable is it that substance B will be formed that a court of law will no longer countenance the possibility of my manufacturing a certain amount of blood group substance A—though substances A and B are almost identical physically and chemically.


To Perish by Silence

... What is needed, suggests Oppenheimer, is a harsh modesty, an affirmation that common men cannot, in fact, understand most things and that the realities of which even a highly trained intellect has cognizance are few and far between.

With respect to the sciences, this somber view seems unassailable. And perhaps it dooms most knowledge to fragmentation. But we should not readily accede to it in history, ethics, economics, or the analysis and formulation of social and political conduct. Here literacy must reaffirm its authority against jargon. I do not know whether this can be done; but the stakes are high. In our time, the language of politics has become infected with obscurity and madness. No lie is too gross for strenuous expression, no cruelty too abject to find apologia in the verbiage of historicism. Unless we can restore to the words in our newspapers, laws, and political acts some measure of clarity and stringency of meaning, our lives will draw yet nearer to chaos. There will then come to pass a new Dark Ages.—George Steiner: Language and Silence: Essays on Language, Literature, and the Inhuman. New York, Atheneum, 1967, p. 34.