J. Willis Hurst

# The Heart

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## THE HEART Arteries and Veins

### THE Arteries and Veins HEART

Fifth Edition

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### MCGRAW-HILL BOOK COMPANY

New York St. Louis San Francisco Auckland Bogotá Guatemala Hamburg Johannesburg Lisbon London Madrid Mexico Montreal New Delhi Panama Paris San Juan São Paulo Singapore Sydney Tokyo Toronto

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Medicine is an ever-changing science. As new research and clinical experience broaden our knowledge, changes in treatment and drug therapy are required. The editors and the publisher of this work have made every effort to ensure that the drug dosage schedules herein are accurate and in accord with the standards accepted at the time of publication. Readers are advised, however, to check the product information sheet included in the package of each drug they plan to administer to be certain that changes have not been made in the recommended dose or in the contraindications for administration. This recommendation is of particular importance in regard to new or infrequently used drugs.

### THE HEART Arteries and Veins

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1234567890 DODO 8987654321

ISBN 0-07-031481-0 ISBN 0-07-031483-7 ISBN 0-07-031484-5 ISBN 0-07-079033-7

This book was set in Baskerville by Waldman Graphics, Inc. The editors were Richard S. Laufer, Ellen Warren, and Moira Lerner; the production supervisors were Jenet C. McIver and Jeanne Skahan; the design was done by Caliber Design Planning, Inc.; the index was prepared by Philip James.

R. R. Donnelley & Sons Company was printer and binder.

### **Library of Congress Cataloging in Publication Data** Main entry under title:

The Heart, arteries and veins.

ISBN 0-07-079033-7 (set)

Issued also in 2 v.

Includes bibliographical references and index.

1. Cardiovascular system—Diseases. I. Hurst,

J. Willis (John Willis), date RC667.H42 1982 616.1 81-13641 ISBN 0-07-031481-0 AACR2

LC CIP DATA (2 vol. ed.)
RC667.H42 1982b 616.1 81-13642
ISBN 0-07-031483-7 (vol 1) AACR2
ISBN 0-07-031484-5 (vol 2)

To those who are in the profession\* of serving the sick.

\*"The essential characteristic of a profession is the dedication of its members to the service they perform." M. J. Adler, *Great Ideas from the Great Books*, Washington Square Press, Inc., New York, 1961, p. 282.

Also see the quotation from Judge Elbert Tuttle at the beginning of Chapter 6.

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### **Preface**

Research is endlessly seductive; writing is hard work. One has to sit down on that chair and think and transform thought into readable, consecutive, interesting sentences that both make sense and make the reader turn the page. It is laborious, slow, often painful, sometimes agony. It means rearrangement, revision, adding, cutting, rewriting. But it brings a sense of excitement, almost of rapture; a moment on Olympus. In short, it is an act of creation.

Barbara W. Tuchman<sup>1</sup>

The first edition of *The Heart* was conceived in 1962 and born in 1966. The objective of *The Heart* has always been to assist physicians and other health personnel in their effort to provide excellent medical care for their patients. From the beginning we linked basic science principles to the identification and solution of clinical problems. We included discussions of the arteries and veins, as well as all-encompassing discussions of the heart itself. As we wrote, we had clinicians and their patients in mind.

The four previous editions of *The Heart* were well received by physicians, students, house officers, fellows, and other personnel. Our fondest dream was exceeded when *The Heart* was chosen on several occasions by the American College of Physicians as the cardiology book that should be in every internist's library. *The Heart* achieved considerable success in this country and was translated into Italian, Spanish, Portuguese, Japanese, and Greek. Its worldwide success was then ensured.

While it is easy to be content with success, I have always held that changes in institutions, programs, and books should be made at a time when success is apparent. I believe very strongly that the greatest peril of excellence is contentment.<sup>2</sup> Accordingly, I felt The Heart should be revised at a time when it was enjoying its greatest success. The time had come to reorganize and to rewrite the entire book in an effort to set the tone for the teaching and practice of cardiology for the eighties.

To help in the planning and editing of this major undertaking, three eminent cardiologists—distinguished for their scientific, clinical, and educational contributions to the field—have joined the editorial board. Drs. Charles E. Rackley, Edmund H. Sonnenblick, and Andrew G. Wallace have already

1. Tuchman, B. W.: In Search of History, Radcliffe Quarterly, 65(1):34, 1979.

2. Hurst, J. W. (ed.): The Perils of Excellence, in "Four Hats", Year Book Medical Publishers, New York, 1970, pp. 42–44.

made substantial contributions to *The Heart*, and they are most gratefully and enthusiastically welcomed.

The fifth edition began with a two-day "think tank" in a Washington hotel, July 11 to 13, 1979, when the new editors joined the old editors for the first time. New ideas were abundant, and each new idea was examined carefully. We were determined to write a book that would assist the practicing physician in the care of his or her patients. We would continue to link basic science information to the clinical problems. We reasoned that we should highlight the cardiovascular questions that we believed physicians should ask about their patients and discuss the new techniques used in cardiology as methods devised to answer these questions. We would deemphasize the routine use of techniques before the proper questions have been formulated in the minds of physicians. This led to the development of the new format for the fifth edition, which included the creation of the short prefaces that introduce each of the six parts of the book. We hope the miniprefaces will be carefully read, for they will guide the reader through the book.

While we strove to eliminate unnecessary duplication in the book, there is some purposeful duplication. Unnecessary duplication in a book is like placing one shingle directly on top of another shingle on a roof. This does not guarantee that the roof will not be filled with holes. Purposeful duplication is similar to placing the end of a shingle over the end of another shingle. When this is done carefully, it produces continuity and eliminates holes. Thus, we have retained the duplication that provides continuity, eliminates holes, and reinforces the points we have tried to make.

The fourth edition of *The Heart* had "daughters." They were *Self-Assessment and Review of the Heart* and five Updates. The self-assessment book was developed so that Continuing Medical Education (CME) credit was given by the Department of Continuing Medical Education of Emory University School of Medicine. The Update series has been very popular. (An index was placed in the last Update of the series). The purpose of the Updates has been to present new ideas that updated the information presented in the previous editions of *The Heart;* old subjects that needed updating and new emphasis; and more detailed discussions of interesting subjects. The discussions in the Updates have been exciting and may not be found in other textbooks or journals.

The daughters were well received by the read-

### **PREFACE**

ership and will continue. Accordingly, a self-assessment book (permitting CME credit) and five Updates will follow this edition also. *The Heart* plus the self-assessment book plus the five Updates offer the most extensive discussions of the heart and its diseases that have ever been developed.

I want to express my appreciation to all who made this edition of *The Heart* possible. I wish to thank our predecessors in medicine. In doing so I agree with the philosopher who said, "He who drinks the water should not forget who dug the well."

I wish to thank my secretary, Carol Miller, who can type with lightning speed, edit beautifully, keep order, and smile. I also thank Paula Noriega and Mary Garner in my office for their special contribution to typing and editing the manuscripts. They are invaluable.

The secretaries of the authors deserve our grat-

itude. Accordingly, we have devoted a special page of the book to the acknowledgement of their help.

I thank my colleagues in the Departments of Medicine, Pediatrics, and Surgery for their help. I thank Dean James Glenn, Vice-President Garland Herndon, and President James Laney of Emory University for their encouragement and support.

I thank Rich Laufer, Dereck Jeffers, M. Lorraine Andrews, Anthony Castagna, Moira Lerner, Jenet McIver, Jeanne Skahan, and Ellen Warren of McGraw-Hill Book Company for their remarkable ability and creativity.

I thank my wife Nelie. No Nelie, no book. She has been the center of my private world since we were sixteen. I thank her for all she has done to make our life together so meaningful.

I encourage the readers to write me. Remember, the book is written for *physicians and others who take care of patients*. We hope you have as much fun reading—and studying—the book as we did writing it.

J. Willis Hurst, M.D.

### **ACKNOWLEDGMENTS**

The people whose names are listed below contributed a great deal to the creation of this book. The authors and editors express their special thanks and gratitude to them.

- Libby Adams, Emory University School of Medicine, Atlanta, Georgia
- Patricia Allen, Cedars-Sinai Medical Center, Los Angeles, California
- Joyce Anderson, The University of Nebraska Medical Center, Omaha, Nebraska
- Marilyn K. Anderson, University of Alabama Medical Center, Birmingham, Alabama
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- Linda J. Barth, Harborview Medical Center, Seattle, Washington
- Elizabeth Bashford, Royal Postgraduate Medical School, London, England
- Elaine Beckham, Emory University School of Medicine, Atlanta, Georgia
- Dr. Victor S. Behar, Duke University Medical Center, Durham, North Carolina
- Sherri Bell, University of California School of Medicine, Los Angeles, California
- Sylvia L. Bell, University of Alabama Medical Center, Birmingham, Alabama
- Jane Betts, Duke University Medical Center, Durham, North Carolina
- Anne Binetti, New Jersey Medical School, Newark, New Jersey
- Maxine Blob, Temple University Health Sciences Center, Philadelphia, Pennsylvania
- James Bradford, Ph.D., Emory University School of Medicine, Atlanta, Georgia
- Alison Brown, Emory University School of Medicine, Atlanta, Georgia
- Audrey Brown, New Jersey Medical School, Newark, New Jersey
- Gerry Brown, Emory University School of Medicine, Atlanta, Georgia
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- Debby Butler, Texas Heart Institute, Houston, Texas Helen Callahan, Baylor College of Medicine, Houston,

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- Sue Chiaramonti, Duke University Medical Center, Durham, North Carolina
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- Ruth Dawson, The University of Iowa, Iowa City, Iowa Selma DeBakey, Baylor College of Medicine, Houston, Texas
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- Patricia Edwards, Cedars-Sinai Medical Center, Los Angeles, California
- Dorothy M. Efland, Duke University Medical Center, Durham, North Carolina
- Helen Emerick, University of Washington School of Medicine, Seattle, Washington
- Michelle J. Enriquez, University of Miami School of Medicine, Miami, Florida
- Donna Erickson, University of Colorado Health Sciences Center, Denver, Colorado
- Judy Evans, Emory University School of Medicine, Atlanta, Georgia
- Charlotte Fairchild, Georgetown University Medical Center, Washington, D.C.
- Rita Feran, The Cleveland Clinic Foundation, Cleveland, Ohio
- Santa L. Ferraro, University of Minnesota, Minneapolis, Minnesota
- Princella Fields, Grady Memorial Hospital, Atlanta, Georgia
- Helen B. Fischer, University of Oregon Health Sciences Center, Portland, Oregon

### **ACKNOWLEDGMENTS**

- Barbara Fluitt, University of Colorado Health Sciences Center, Denver, Colorado
- Martha Ford, Medical University of South Carolina, Charleston, South Carolina
- Mary L. Garner, Emory University School of Medicine, Atlanta, Georgia
- Vittorio Gattai, Istituto di Fisiologia Clinica del CRN, Pisa, Italy
- Donna Glenn, Vanderbilt University School of Medicine, Nashville, Tennessee
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- Barbara Green, Emory University School of Medicine, Atlanta, Georgia
- Dr. Steve Grossman, Duke University Medical Center, Durham, North Carolina
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- Suzanne Howatt, University of Massachusetts Medical Center, Worcester, Massachusetts
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- Sarah Overaker, Duke University Medical Center, Durham, North Carolina
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Connee Wethee, Piedmont Hospital, Atlanta, Georgia Peggy N. Wilder, Medical University of South Carolin

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Beryl Wilson, Medical College of Georgia, Augusta, Georgia

Mary Wirt, The University of Alabama Medical Center, Birmingham, Alabama

Marguerite Wismont, The University of Nebraska Medical Center, Omaha, Nebraska

Carla Wolfe, North Carolina Memorial Hospital, Chapel Hill, North Carolina

Julia Wright, Grady Memorial Hospital, Atlanta, Georgia Jeanette Zahler, Emory University School of Medicine, Atlanta, Georgia

### THE HEART Arteries and Veins

### Prologue