

# HENRY FORD HOSPITAL

International Symposium on

# Cardiovascular Surgery

#### © 1955, BY W. B. SAUNDERS COMPANY

#### COPYRIGHT UNDER THE INTERNATIONAL COPYRIGHT UNION

#### ALL RIGHTS RESERVED

This book is protected by copyright. No part of it may be duplicated or reproduced in any manner without written permission from the publisher.

Made in the United States of America

Press of W. B. Saunders Company, Philadelphia

Library of Congress Catalog Card Number: 55-11301

# HENRY FORD HOSPITAL International Symposium on

#### **COMMITTEE**

Henry Ford Hospital

CONRAD R. LAM, Chairman

JOHN W. KEYES

D. EMERICK SZILAGYI

ROBERT F. ZIEGLER

Advisory Members

RICHARD J. BING, BIRMINGHAM

MICHAEL E. DEBAKEY, HOUSTON

STANLEY GIBSON, CHICAGO

EMILE HOLMAN, SAN FRANCISCO

# Cardiovascular

# Surgery

Studies in Physiology,
Diagnosis and Techniques

Proceedings of the Symposium held at
HENRY FORD HOSPITAL
Detroit, Michigan; March, 1955

Edited by CONRAD R. LAM, M.D. SURGEON-IN-CHARGE, DIVISION OF THORACIC SURGERY, HENRY FORD HOSPITAL

W. B. SAUNDERS COMPANY

Philadelphia London 1955

# **PARTICIPANTS**

#### E. COWLES ANDRUS, M.D., F.A.C.P.

Associate Professor of Medicine, Johns Hopkins University School of Medicine; Physician-in-Charge, Adult Cardiac Clinic, Johns Hopkins Hospital, Baltimore.

#### HENRY T. BAHNSON, M.D., F.A.C.S.

Associate Professor of Surgery, John Hopkins University School of Medicine; Johns Hopkins Hospital, Baltimore.

#### CHARLES P. BAILEY, M.D., F.A.C.S.

Professor of Surgery, Hahnemann Medical College; Head, Bailey Thoracic Clinic, Philadelphia.

#### CLAUDE S. BECK, M.D., Sc.D., F.A.C.S.

Professor of Cardiovascular Surgery, Western Reserve University School of Medicine; Associate, University Hospitals of Cleveland.

# WILFRED G. BIGELOW, M.D., F.R.C.S.

Assistant Professor, University of Toronto Faculty of Medicine; Staff Surgeon, Toronto General Hospital.

# RICHARD J. BING, M.D.

Professor of Experimental Medicine, Medical College of Alabama, Birmingham.

# ARTHUR H. BLAKEMORE, M.D.

Associate Professor of Clinical Surgery, College of Physicians and Surgeons, Columbia University; Presbyterian Hospital, New York.

# S. GILBERT BLOUNT, JR., M.D.

Associate Professor of Medicine, University of Colorado Medical School, Denver.

# SIR RUSSELL BROCK, M.S., F.R.C.S., F.A.C.S. (Hon.)

Thoracic Unit, Guy's Hospital, London, England.

vi Participants

#### DENTON A. COOLEY, M.D., F.A.C.S.

Assistant Professor of Surgery, Baylor University College of Medicine; Attending Surgeon, Jefferson Davis, Methodist, and Veterans Administration Hospitals, Houston, Texas.

#### CLARENCE CRAFOORD, M.D., F.A.C.S. (Hon.)

Surgeon-in-Chief, Surgical Clinic, Sabbatsberg Hospital, Stockholm, Sweden.

# OSCAR CREECH, Jr., M.D., F.A.C.S.

Assistant Professor of Surgery, Baylor University College of Medicine; Chief of Surgery, Veterans Administration Hospital; Attending Surgeon, Methodist and Jefferson Davis Hospitals, Houston, Texas.

#### J. FRANCIS DAMMANN, Jr., M.D.

University of Virginia Medical School, Charlottesville, Virginia.

#### MICHAEL E. DEBAKEY, M.D., F.A.C.S.

Professor of Surgery, Baylor University College of Medicine; Surgeonin-Chief, Jefferson Davis and Methodist Hospitals; Consultant in Surgery, Veterans Administration Hospital, Houston, Texas.

#### CHARLES DUBOST, M.D.

Chief Surgeon, No. 1 Broussais Hospital, Paris, France.

# JESSE E. EDWARDS, M.D.

Professor of Pathology, University of Minnesota Medical School; Consultant, Section of Pathology, Mayo Clinic, Rochester, Minnesota.

# W. STERLING EDWARDS, M.D.

Assistant Professor of Surgery, Medical College of Alabama; Visiting Surgeon, Jefferson Hillman Hospital; Attending Surgeon, Veterans Administration Hospital, Birmingham.

# GUNNAR EKSTRÖM, M.D.

H.K.H. Kronprincessan Lovisas Vardanstalt for Sjaka Bain, Stockholm, Sweden.

# EGBERT H. FELL, M.D., F.A.C.S.

Clinical Associate Professor of Surgery, University of Illinois College of Medicine; Attending Cook County and Presbyterian Hospitals, Chicago.

PARTICIPANTS

#### FRANK L. A. GERBODE, M.D., F.A.C.S.

Associate Clinical Professor of Surgery, Stanford University School of Medicine; Stanford University Hospital, San Francisco.

# JOHN H. GIBBON, JR., M.D., F.A.C.S.

Professor of Surgery and Director of Surgical Research, Jefferson Medical College; Jefferson Medical College Hospital, Philadelphia.

#### ROBERT P. GLOVER, M.D.

Clinical Professor of Thoracic Surgery, Hahnemann Medical College; Chief of Thoracic Surgery, Episcopal Hospital, Philadelphia.

#### OLGA M. HARING, M.D.

Research Associate in Cardiology, Chicago Medical School.

# DWIGHT E. HARKEN, M.D., F.A.C.S.

Clinical Professor of Surgery, Harvard Medical School; Surgeon, Peter Bent Brigham Hospital; Chief of Thoracic Surgery, Mt. Auburn Hospital, Boston.

# REJANE M. HARVEY, M.D.

Associate in Medicine, Columbia University College of Physicians and Surgeons; Cardiopulmonary Laboratory of the First Medical and Chest Services (Columbia University Division), Bellevue Hospital, New York.

# HARPER K. HELLEMS, M.D.

Assistant Professor of Medicine, Wayne University College of Medicine, Detroit.

# EMILE HOLMAN, M.D., F.A.C.S.

Professor of Surgery, Stanford University School of Medicine; Head, Department of Surgery, Lane and Stanford University Hospitals, San Francisco.

# CHARLES A. HUFNAGEL, M.D., F.A.C.S.

Professor of Surgical Research, Associate Professor of Surgery, Georgetown University Medical School; Georgetown University Hospital, Washington, D.C.

# HELMUT W. JAEGER, M.D.

Centro Cardiovascular, Servicio de Cirugía, Hospital Calvo Mackenna, Santiago, Chile.

PARTICIPANTS

#### O. HENRY JANTON, M.D.

Associate Professor of Medicine, Hahnemann Medical College; Associate Chief of Medicine, Hahnemann Hospital, Philadelphia.

#### BENGT JONSSON, M.D.

Associate Professor of Pediatrics, Karolinska Institute, Stockholm, Sweden.

#### ORMAND C. JULIAN, M.D., PH.D., F.A.C.S.

Associate Professor of Surgery, University of Illinois College of Medicine; Associate Attending Surgeon, St. Luke's Hospital, Chicago; Attending Surgeon, Veterans Administration Hospital, Hines, Illinois.

#### JOHN KEITH, M.D.

Associate in Surgery, University of Toronto Faculty of Medicine; Hospital for Sick Children, Toronto.

#### JOHN W. KEYES, M.D., F.A.C.P.

Physician-in-Charge, Division of Cardiology, Henry Ford Hospital, Detroit.

#### JOHN W. KIRKLIN, M.D., F.A.C.S.

Assistant Professor of Surgery, Mayo Foundation, University of Minnesota, Rochester.

# RODOLFO KREUTZER, M.D.

Physician-in-Chief, Department of Cardiology, Hospital de Niños, Buenos Aires, Argentina.

# CONRAD R. LAM, M.D., F.A.C.S.

Surgeon-in-Charge, Division of Thoracic Surgery, Henry Ford Hospital, Detroit.

# WILLIAM LIKOFF, M.D.

Associate Professor of Medicine, Hahnemann Medical College; Cardiologist, Bailey Thoracic Clinic, Philadelphia.

# C. WALTON LILLEHEI, M.D., Ph.D., F.A.C.S.

Associate Professor of Surgery, University of Minnesota Medical School; University Hospitals, Minneapolis.

# JOHN LIND, M.D.

Associate Professor of Pediatrics, Karolinska Institute; Wenner-Gren

PARTICIPANTS ix

Cardiovascular Research Laboratory, Nortull's Hospital, Stockholm, Sweden.

JOSEPHUS C. LUKE, M.D., C.M., M.B.E., F.R.C.S., F.A.C.S.

Assistant Professor of Surgery, McGill University Faculty of Medicine; Royal Victoria Hospital, Montreal.

#### IAN K. R. McMILLAN, M.D.

Mackenzie MacKinnon Research Fellow of the Royal College of Physicians and the Royal College of Surgeons; Cardiac Department, St. Thomas' Hospital, London, England.

ANDREW G. MORROW, M.D.

National Heart Institute, National Institutes of Health, Bethesda, Md.

WILLIAM H. MULLER, JR., M.D., F.A.C.S.

Professor of Surgery, University of Virginia School of Medicine, Charlottesville, Virginia.

WILLIAM T. MUSTARD, M.D., M.B.E., F.R.C.S. (C.), F.A.C.S.

Associate in Surgery, University of Toronto Faculty of Medicine; Hospital for Sick Children, Toronto.

ERIC M. NANSON, M.D., F.R.C.S.

Professor of Surgery, University of Saskatchewan School of Medical Sciences; University Hospital, Saskatoon, Saskatchewan.

IRVINE H. PAGE, M.D., F.A.C.P.

Director of Research, Cleveland Clinic Foundation, Cleveland.

ISIDRO PERIANES, M.D.

Servicio Quirúrgico, Hospital de Clínicas, Buenos Aires, Argentina.

WILLIS J. POTTS, M.D., F.A.C.S.

Associate Professor of Surgery, Northwestern University Medical School; Surgeon-in-Chief, Children's Memorial Hospital, Chicago.

CHARLES G. ROB, M.A., M.B., M.C., M.CHIR. (CAMB.), F.R.C.S.

Professor of Surgery, St. Mary's Hospital Medical School, London,
England.

#### DOUGLAS ROBB, M.D., F.R.C.S.

Green Lane Hospital Thoracic and Cardiac Units, Auckland, New Zealand.

#### STANLEY J. SARNOFF, M.D.

Laboratory of Cardiovascular Hemodynamics, National Heart Institute, Bethesda, Md.

# HARRIS B. SHUMACKER, Jr., M.D., F.A.C.S.

Professor of Surgery, Indiana University School of Medicine; Indiana University Medical Center, Indianapolis.

# HERBERT E. SLOAN, JR., M.D., F.A.C.S.

Assistant Professor of Surgery, University of Michigan Medical School, Ann Arbor, Michigan.

#### TYGE SONDERGAARD, M.D.

Aarhus Kommunehospital, Aarhus; Department of Surgery, Rigshospitalet, Copenhagen, Denmark.

#### HENRY SWAN, M.D., F.A.C.S.

Professor of Surgery, University of Colorado School of Medicine; Chief, Department of Surgery, Colorado General Hospital, Denver.

# D. EMERICK SZILAGYI, M.D., F.A.C.S.

Surgeon-in-Charge, Surgical Section B, Henry Ford Hospital, Detroit.

# HELEN B. TAUSSIG, M.D.

Associate Professor of Pediatrics, John Hopkins University School of Medicine; Physician in Charge, Cardiac Clinic, Harriet Lane Home, Baltimore.

# FERNANDO TRICERRI, M. D.

Servicio Quirúrgico, Hospital de Niños, Buenos Aires, Argentina

# ROBERT F. ZIEGLER, M.D.

Physician-in-Charge, Division of Pediatric Cardiology, Henry Ford Hospital, Detroit.

#### DISCUSSANTS

#### ALFONSO R. ALBANESE, M.D.

Chief, Albanese Clinic, Buenos Aires, Argentina.

#### VICTOR G. BERNHARD, M.D.

Department of Surgery, Northwestern University Medical School, Chicago.

# DAVID P. BOYD, M.D., F.R.C.S. (C), F.A.C.S.

Department of Surgery, Lahey Clinic; New England Baptist and New England Deaconess Hospitals, Boston.

# J. MAXWELL CHAMBERLAIN, M.D., F.A.C.S.

Associate in Surgery, Columbia University College of Physicians and Surgeons; Brooklyn Thoracic Hospital, Brooklyn, N. Y.

# J. C. DAVILA, M.D.

Presbyterian Hospital, Philadelphia.

# RALPH A. DETERLING, Jr., M.D., Ph.D., F.A.C.S.

Associate Professor of Surgery, Columbia University College of Physicians and Surgeons; Presbyterian Hospital, New York City.

# JAMES D. FRYFOGLE, M.D.

Mt. Carmel Mercy Hospital, Detroit.

# F. D. JOHNSTON, M.D., F.A.C.P.

Professor of Internal Medicine, University of Michigan Medical School; University Hospital, Ann Arbor, Michigan.

# EARLE B. KAY, M.D., M.S. (SURG.), F.A.C.S.

Western Reserve University School of Medicine; Chief, Thoracic Surgery, St. Vincent's Charity Hospital, Cleveland.

# HENRY LABORIT, M.D.

Hopital Militaire, Paris, France.

xii Discussants

#### HENRY B. LARZELERE, M.D.

Toledo Hospital and St. Vincent's Hospital, Toledo, Ohio.

#### SANFORD E. LEEDS, M.D., F.A.C.S.

Assistant Clinical Professor of Surgery, University of California School of Medicine, Berkeley-San Francisco; Associate Chief of Surgery, Mt. Zion Hospital, San Francisco.

#### THOMAS J. E. O'NEILL, M.D.

Associate Professor of Surgery, Hahnemann Medical College; Episcopal Hospital, Philadelphia.

# ANGELO RIBERI, M.D.

Indiana University Medical Center, Indianapolis, Indiana.

# ROSS ROBERTSON, M.D., F.R.C.S. (C.)

Vancouver General Hospital, Vancouver, B. C.

#### MARCEAU SERVELLE, M.D.

Paris, France.

#### WILLIAM K. SWANN, M.D.

St. Mary's Hospital, Knoxville, Tennessee.

# **PREFACE**

During the summer of 1954, the staff of the Henry Ford Hospital, with the encouragement of the executive director, Dr. Robin C. Buerki, decided to sponsor an international symposium on the subject of surgery of the heart and great vessels. With realization of the importance of applied physiology and diagnostic methods, the following title was chosen for a symposium to be held on March 17, 18 and 19, 1955: Cardiovascular Surgery: Recent Studies in Physiology, Diagnosis and Techniques. The local program committee sought and obtained the assistance of four eminent authorities from outside the staff of the hospital. Grateful acknowledgment is made for the valuable advice of Dr. Richard J. Bing of Birmingham, Alabama, representing the field of applied cardiac physiology, Dr. Stanley Gibson of Chicago, pediatric cardiologist, Dr. Emile Holman of San Francisco, and Dr. Michael DeBakey of Houston, Texas, surgeons who have had particular interest in cardiovascular disease.

The program committee met in Detroit and carefully considered the material which appeared to be essential for discussion. It was thoroughly understood that the symposium was not to be a postgraduate course in which subject matter well known to certain specialists would be reviewed, but rather it would be an opportunity for the presentation of really new and perhaps controversial work. It was decided to spend one day on the problems of congenital heart disease, another on acquired heart disease, and a half day on surgery of the aorta and other arteries.

Invitations to participate in the symposium were sent to sixty workers in the field, many of whom resided in countries other than the United States. The response on the part of the invitees was nearly 100 per cent in the affirmative. The tentative program was changed from time to time to incorporate certain late suggestions from the participants and others. Two months before the meeting, the final program was sent to a selected list of teachers and workers to whom the symposium material would presumably have special interest and value. Several weeks before the date of the symposium, there were more applications than there were seats in the Clinic Building Auditorium. Thereafter, the local committee was obliged to send letters of regret. The final registration list contained the names of 478 doctors, from 35 states and the following other countries: Argentina, Australia, Brazil, Canada, Chile, Colombia, Costa Rica, Cuba, Denmark, Great Britain, France, Holland, India, Italy, Jordan, Mexico, New Zealand, Norway, Puerto Rico, Sweden, Switzerland and Venezuela.

This volume contains the material which was presented during the two and one-half days of the symposium. The participants responsible for the prin-

xiv Preface

cipal papers have cooperated by furnishing manuscripts which are amply illustrated. The editor acknowledges the excellent work of Mrs. Charlotte Emmons of the Master Reporting Company who accurately stenotyped the discussions, many of which were given in the delightful accents of the foreign participants.

The editor is grateful for the cooperation and assistance so freely provided

by the staff of the W. B. Saunders Company.

A final word of appreciation on behalf of the program committee should be given to those whose work is reported in this volume—the participants, who left their important teaching work and busy practices to form this symposium.

CONRAD R. LAM

Detroit, Michigan

# FOREWORD\*

# By SIR RUSSELL BROCK

I must first thank you for the great honor you have done me in asking me to be your guest speaker at the dinner tonight marking the occasion of this great international symposium. I little knew what I was letting myself in for when Conrad Lam spoke to me about this meeting in September last at the International Cardiac Congress in Washington. He told me that it would be "just a small friendly crowd of people interested in cardiovascular surgery chatting together round a table." Now I find myself addressing a crowd of between 400 and 500 of you, and as I survey this large throng my pride in being asked to speak to you is modified by the difficulty of the occasion. While I stand before you on this lonely pinnacle I am reminded of the story of Sir Edmund Hillary's reply when he was asked his emotions as he stood on the top of Everest. Hillary said he experienced three emotions: the first was relief at having reached the summit, the second was pleasure at having achieved the goal so long sought, and the third and most powerful emotion was an intense desire to get down again as quickly as possible.

I am especially grateful to you for asking me to address you as I realize that, being a foreigner, the honor is so much the greater. At the same time I am very happy to be able to speak to you as this is far from being my first visit to the United States; not only have I many, many friends here, but I have looked upon it as my second surgical home ever since I was privileged to work with Professor Evarts Graham in St. Louis nearly twenty-five years ago. The impressions and inspiration I gained then as a young surgeon visiting Barnes Hospital and numerous other great surgical centers in your country were such a powerful influence that they had a permanent effect on my surgical thoughts and career. I am particularly proud of the certificate I hold that proclaims I am a visiting surgeon to Barnes Hospital. I am equally proud of a similar certificate giving to me the rank of honorary surgical consultant to the Johns Hopkins Hospital in 1949 after I had spent a wonderful and happy month there as visiting professor.

If I had not known beforehand how important and successful this symposium was to be I should have begun to guess as soon as I got on the 'plane to cross the Atlantic. As fellow passengers I found several friends and surgical acquaintances from Great Britain and from other European countries. I think one of the most significant testimonies to the success of the symposium is exemplified in the way so many men have come such long distances from

<sup>\*</sup> Text of an address delivered at the dinner meeting of the Henry Ford Hospital International Symposium on Cardiovascular Surgery, March 18, 1955.

xvi Foreword

far off countries, and at great personal expense, to attend our deliberations. I think they have been well rewarded for their trouble by the excellence of the symposium and I am sure I shall be speaking for all of you when I accord not only our sincere congratulations but also our best thanks to the organizers for the truly magnificent job they have done. Chief among these must be our friend Conrad Lam, who has obviously been the inspiring genius in the matter.

In addition to the many who have come simply to listen to the presentations and discussions, and these include many names famous in thoracic medicine and surgery, there is a formidable list of participants invited to present papers or to take part in the panel discussions. It is impossible to mention all the distinguished names here today, but as my eye traveled down the list of participants I felt I must say a few words about some of them. I mention them in simple alphabetical order and I first see Dr. E. C. Andrus, recently President of the American Heart Association, whom I last met while he was shaking hands in the long receiving line at the Washington Congress; he was a friend I first met earlier at Baltimore in 1949. Henry Bahnson, another friend from Baltimore, came to Guy's in 1947 as first assistant to his distinguished chief, Alfred Blalock, who honored us by spending a month there as exchange professor and by demonstrating to large crowds of eager visitors the technique of the new Blalock-Taussig operation. We all felt sure that Henry would go far and this feeling has been justified, as we all know when we hear him speak of the magnificent work he is doing in this difficult task of resection of aneurysms of the aorta.

There are several immortals in the field of cardiac surgery here tonight, men who have made great fundamental contributions; always prominent amongst these pioneers will be Charles Bailey. In addition to his intrinsic contributions in cardiac surgery I feel that by his very enthusiasm and continued effort he has perhaps done more than anyone else in this country to press forward the acceptance and development of cardiac surgery.

Claude Beck, the veteran of cardiac surgery, a man who has devoted a lifetime to the study of the surgical relief of cardiac ischemia, delighted us all by his brilliant speech today on the treatment of cardiac arrest, another subject to which he has made great contributions and with which his name will be forever associated.

Dr. Bigelow, from Toronto, who has pioneered the fundamental work in hypothermic states.

Richard Bing who gave us the execllent opening paper yesterday on cardiac catheterization and who, in addition to being such an able investigator, is such a delightful companion and humorist.

Gilbert Blount—there is a fighting physician for you; right up in the front line of the operating room where many more cardiologists could be with benefit.

Denton Cooley who with his senior, Michael DeBakey, presented his magnificent work in the resection of aortic aneurysms, and especially a phenomenally large number of abdominal ones, was another friend I made at Baltimore. We were then very pleased to have him for six months in London where he worked as first assistant on my unit at the Brompton Hospital.

试读结束,需要全本PDF请购买 www.ertongbook.com