CIRCULATION

VOLUME XXIII
January—June 1961

No. 1

EDITORIAL:
Stephen Hales, September 17, 1677-January 4, 1761. Howard B. Burchell... 1

ORIGINAL ARTICLES:
Reoperation for Mitral Stenosis. A Discussion of Postoperative Deterioration
and Methods of Improving Initial and Secondary Operation. Dwight E.
Harken, Harrison Black, Warren J. Taylor, Wendell B. Thrower, and
Laurence B. Ellis ................................. 7

Raynaud's Disease with Sclerodactyliia. A Follow-Up Study of Seventy-one

Pulmonary Artery Banding. A Treatment for Infants with Intractable Cardiac
Failure due to Interventricular Septal Defects. Harold M. Albert, Richard
L. Fowler, Claude C. Craighead, Bertram A. Glass, and Mohammad Atik. 16

Precordial Scanning. Applications in the Detection of Left-to-Right Circula-
tory Shunts. William P. Cornell, Eugene Braunwald, and Andrew G. Morrow 21

An Electrocardiographic Pattern Associated with Mitral Valve Deformity in
Marfan's Syndrome. Dorrance Bowers 30

Separated Renal Functions in Patients with Renal Arterial Disease, Pyelo-
nephritis, and Essential Hypertension. Harriet P. Dustan, Eugene F. Pout-
tasse, A. C. Coreorain, and Irvine H. Page 34

Ruptured Mitral Chordae Tendineae. Philip J. Osmundson, John A. Callahan,
and Jesse E. Edwards 42

Myocardial Blood Flow and Oxygen Consumption during Postprandial Lipemia
and Heparin-Induced Lipolysis. Timothy J. Regan, Kenan Binak, Seymour
Gordon, Valentino DeFazio, and Harper K. Hellemes 55

An Appraisal of the Double Indicator-Dilution Method for the Estimation of
Mitrail Regurgitation in Human Subjects. William S. Wilson, Ralph L.
Brandt, Richard D. Judge, Joe D. Morris, and Mary E. Clifford 64

Relationship between the Electrocardiogram and the Position of the Heart
as Determined by Biplane Angiocardiography. Warren G. Guntheroth,
Carl-Olof Ovenfors, and Danae Ikkos 69

Total Anomalous Pulmonary Venous Drainage at Cardiac Level. Angiocardi-
ographic Differentiation. R. D. Rowe, I. H. Glass, and J. D. Keith 77

Intracardiac Knotting of the Catheter during Right Heart Catheterization.
John F. Skinner and John T. Burroughs 81

Origin of Right Pulmonary Artery from Ascending Aorta. C. A. Wagenvoort,
Henry N. Neufeld, Richard F. Birge, John A. Caffrey, and Jesse E. Edwards 84

Cor Triloculare Biatrium. Survival to Adult Life. William N. Chambers,
Modestino G. Criscitiello, and Fairfield Goodale 91

SYMPOSIUM ON CORONARY HEART DISEASE:
Measurements of Enzymes in the Diagnosis of Acute Myocardial Infarction.
Milton W. Hamolsky and Nathan O. Kaplan 102

Surgical Treatment of Angina Pectoris. Michael E. De Bakey and Walter S.
Henly 111
CONTENTS OF VOLUME XXIII

CLINICAL PROGRESS:
Management of the Cardiac Patient Requiring Major Surgery. Stanford Wessler and Herrman L. Blumgart .......................................................... 121

SPECIAL REPORT:
Dietary Fat and Its Relation to Heart Attacks and Strokes. A Report by the Central Committee for Medical and Community Program of the American Heart Association .................................................. 133

BOOKS REVIEWED ............................................................... 137
BOOKS RECEIVED .............................................................. 140
ABSTRACTS ........................................................................ 141
NEWS FROM THE AMERICAN HEART ASSOCIATION .............. 159
CONTRIBUTORS TO THIS ISSUE ............................................ 162

No. 2

EDITORIAL:
Thromboangiitis Obliterans: Fact or Fancy. Stanford Wessler .......... 165

ORIGINAL ARTICLES:
Essential Hypertension and Aldosterone. Eleanor H. Venning, Inge Dyrenfurth, John B. Dossetor, and John C. Beck ........................................ 168
Tomographic Evaluation of Hemodynamic Changes in Mitral Stenosis with a Statistical Note on Normal Tomographic Findings. M. J. Dulfano and H. Adler ................................................................. 177
Ballistocardiographic Study in Severe Anemia. O. P. Tandon and B. C. Katiyar ................................................................. 195
Effects of Reduced Glomerular Filtration Rate on Responsiveness to Chlorothiazide and Mercurial Diuretics. F. C. Reubi and P. T. Cottier ........ 200
The Antihypertensive Actions of Benzothiadiazines. Bertram M. Winer .... 211
Biochemical Studies in Full-Blooded Navajo Indians. II. Lipids and Lipoproteins. Robert J. Kositchek, Moses Wurm, and Reuben Straus ................. 219
The Electrocardiogram in Ventricular Septal Defect. Dennis J. Vine and John D. Keith ................................................................. 225
The Association of Complete Heart Block and Adams-Stokes Syndrome in Two Cases of Mobitz Type of Block. Case Reports. Jerome G. Kaufman, Fred W. Waechtel, Edwin Rothfield, and Arthur Bernstein ................. 253

Circulation, Volume XXIII, June 1961
CONTENTS OF VOLUME XXIII

SPECIAL ARTICLE:
William Harvey and His Contributions. Frederick G. Kilgour.............. 286

CLINICAL PROGRESS:
The Clinical Value of Vectorcardiography. Franklin D. Johnston........ 297

ABSTRACTS .............................................................. 304

NEWS FROM THE AMERICAN HEART ASSOCIATION ..................... 320

CONTRIBUTORS TO THIS ISSUE ........................................ 323

No. 3

EDITORIAL:
Cardiogenic Shock in Acute Myocardial Infarction. Charles K. Friedberg.... 325

ORIGINAL ARTICLES:
Atrial Infarction of the Heart. Chi Kong Liu, Gilbert Greenspan, and Ronald T. Pecirillo .............................................. 331
Congenital Mitral Insufficiency. Norman S. Talner, Aaron M. Stern, and Herbert E. Sloan.................................................. 339
Acute Hemorrhage and Necrosis of the Intestines Associated with Digitalization. Peter C. Gazes, Charles R. Holmes, Vinee Moseley, and H. Rawling Pratt-Thomas ...................................................... 358
Studies on Digitalis. III. The Influence of Triiodothyronine on Digitalis Requirements. Robert L. Frye and Eugene Braunwald........ 376
Premature Ventricular Depolarization. Cesar A. Caeeres ................................................................. 383
Further Studies on a Theory of the Ballistocardiogram. Abraham Noordergraaf ............................................................ 413
Physical Aspects of the “Direct” Recording of Body Displacement, Velocity, and Acceleration by Shin-Bar Ballistocardiographs. Abraham Noordergraaf ................................................... 426

SPECIAL ARTICLE:
Some Physiopathologic Regularities in the Process of Dying and Resuscitation. V. A. Negovsky .................................................. 452

CLINICAL PROGRESS:
Recent Trends in Therapy of Cerebral Vascular Disease. Sigmund N. Groch and Irving S. Wright ........................................... 458

ABSTRACTS .............................................................. 466

NEWS FROM THE AMERICAN HEART ASSOCIATION ..................... 479

CONTRIBUTORS TO THIS ISSUE ........................................ 483
CONTENTS OF VOLUME XXIII

No. 4

EDITORIAL:
The Congenital Bicuspid Aortic Valve. Jesse E. Edwards

ORIGINAL ARTICLES:
Primary Myocardial Disease. Noble O. Fowler, Mosche Gueron, and David T. Rowlands, Jr.
Aortic Stenosis. Correlations between Pressure Gradient and Left Ventricular Angiocardiology. Viking Olov Björk, Ingemar Cullhed, and Herman Lodin
The Value of Quinidine in the Prevention of Atrial Fibrillation after Mitral Valvuloplasty. Harrison Black, Bernard Lown, and Anthony F. Bartholomay
Long-Term Results of Aortic-Pulmonary Anastomosis for Tetralogy of Fallot. An Analysis of the First 100 Cases Eleven to Thirteen Years after Operation. Milton H. Paul, Robert A. Miller, and Willis J. Potts
Clinical Evaluation of Intravenous Abdominal Aortography and Peripheral Arteriography. Israel Steinberg
The Frequency of Aschoff Bodies in Atrial Appendages of Patients with Mitral Stenosis. Relationship to Age, Atrial Thrombosis, and Season. B. H. Ruebner and J. K. Boitnott
Sodium from Drinking Water as an Unsuspected Cause of Cardiac Decompensation. George B. Elliott and Elizabeth A. Alexander
Effect of Exercise on Electrocardiograms of Patients with Low Serum Potassium. A. J. Georgopoulos, W. L. Proudft, and Irvine H. Page
Plasma Heparin Levels. Correlation with Serum Cholesterol and Low-Density Lipoproteins. H. Engelberg
Plasma Heparin Levels in Normal Man. H. Engelberg
The Mechanical Consequences of Anomalous Atrioventricular Excitation (WPF Syndrome). Harold W. March, Arthur Selzer, and Herbert N. Hultgren
Aortic Pressures during Closed-Chest Cardiac Massage. Victor Gurewich, Arthur A. Sasahara, James S. Quinn, Catherine J. Peffer, and David Littmann
Isolated Incompetence of the Pulmonic Valve. Ben O. Price
Origin of Both Great Vessels from the Right Ventricle. II. With Pulmonary Stenosis. Henry N. Neufeld, James W. DuShane, and Jesse E. Edwards

CLINICAL PROGRESS:

ABSTRACTS

NEWS FROM THE AMERICAN HEART ASSOCIATION

CONTRIBUTORS TO THIS ISSUE

No. 5

EDITORIAL:
Quantitative Morphology—A New Approach to Cardiac Pathology. Robert P. Grant

ORIGINAL ARTICLES:
Emotional Factors in Coronary Heart Disease. Howard B. Sprague
"Nonspecific" ST and T-Wave Changes. Charles K. Friedberg and Albert Zager

Circulation, Volume XXIII, June 1961
Aortic Valve Perforation in Bacterial Endocarditis. Ralph Tompsett and Glenn D. Lubash ............................................................ 662
Relationship between Arterial Pressure and Negative U Waves in Electrocardiograms. A. J. Georgopoulos, W. L. Proudfit, and Irvine H. Page...... 675
Effects of Erythrol Tetranitrate and Amotriphene on Exercise Tolerance Tests in Angina Pectoris. Arthur Ruskin .................................................. 681
Isolated Ventricular Septal Defect of the Persistent Common Atrioventricular Canal Type. Henry N. Neufeld, Jack L. Titus, James W. DuShane, Howard B. Burchell, and Jesse E. Edwards........................................... 685
The Prognosis of Essential Hypertension Treated Conservatively. Maurice Sokolow and Dorothee Perloff .................................................... 697
Twenty-Year Studies with the Ballistocardiograph. The Relation between the Amplitude of the First Record of "Healthy" Adults and Eventual Mortality and Morbidity from Heart Disease. Isaac Starr and Francis C. Wood...... 714
Blood Volume Changes in Cyanotic Congenital Heart Disease and Polycythemia Rubra Vera. David Vérel ..................................................... 749
Metabolism of Angiotensin II-131 in Normotensive and Hypertensive Human Subjects. Robert L. Wolf, Milton Mendlowitz, Stanley E. Gitlow, and Nosrat Naftchi ................................................................. 754
Vascular Malformation Overlying the Pulmonary Artery Simulating a Patent Ductus Arteriosus. Calvin B. Ernst, Karl P. Klassen, and Joseph M. Ryan.. 759
Obliterating Left Ventricular Mural Thrombosis. Jacob Zatuchni and Kee Ton Tan .......................................................... 762

CLINICAL PROGRESS:

ABSTRACTS ................................................................. 790

NEWS FROM THE AMERICAN HEART ASSOCIATION ....................... 800

CONTRIBUTORS TO THIS ISSUE ........................................... 803

No. 6

EDITORIAL:
The Risk of Coronary Heart Disease. Aneel Keys .......................... 805

ORIGINAL ARTICLES:
Evaluation of the Surgical Correction of Mitral Regurgitation. Earle B. Kay, David Mendelsohn, and Henry A. Zimmerman ........................................... 813
Unipolar QS Morphology and Purkinje Potential of the Free Left Ventricular Wall. The Concept of Electrical Endocardium. Demetrio Sodi-Pallares, Gustavo A. Medrano, Alfredo De Micheli, Mario R. Testelli, and Abdo Bisteni ........................................... 836

Circulation, Volume XXIII, June 1961
CONTENTS OF VOLUME XXIII

Serum Cholesterol and Atherosclerosis in Man. K. S. Mathur, N. L. Patney, V. Kumar, and R. D. Sharma .......................... 847

Electrocardiographic Changes in Head Injuries. Colin Hersch .................. 853


Prognosis of Men Returning to Work after First Myocardial Infarction. George E. Dimond .................................................... 881

Auscultatory Findings in Patients with a Small Ventricular Septal Defect. Luke Van der Hauwaert and Alexander S. Nadas ............. 886

Relationship between Arterial Pressure and Exertional Angina Pectoris in Hypertensive Patients. A. J. Georgopoulos, F. M. Sones, Jr., and Irvine H. Page ...................................................... 892

Prediction of Fainting in Blood Donors. David T. Graham ..................... 901


Atrial Flutter with Irregular Ventricular Response as a Contraindication to Digitalis. Seymour B. London and Rose E. London ..................... 920

Control of Ventricular Tachycardia by Direct Cardiac Electric Shock. J. K. Clarebrough and I. Hopkins ..................................... 925

CLINICAL PROGRESS:


BOOK REVIEWS .......................................................... 942

BOOKS RECEIVED ...................................................... 947

ABSTRACTS .............................................................. 948

NEWS FROM THE AMERICAN HEART ASSOCIATION .......................... 959

CONTRIBUTORS TO THIS ISSUE ........................................ 963

VOLUME AUTHOR INDEX ................................................ 965

VOLUME SUBJECT INDEX ................................................ 967