EDITORIALS:
Symposium on Research on Acute Myocardial Infarction. Stuart Bondurant

Cardiovascular Drugs: Experience of the Drug Efficacy Study (DES). Edward D. Freis

Comment on Drug Efficacy Study. Howard B. Burchell

Propranolol in Tetralogy of Fallot. Gordon R. Cumming

Electroshock Hazards (and Urine as an Electrolyte). Howard B. Burchell

ORIGINAL ARTICLES:
Effects of a Quantitated Physical Training Program on Middle-Aged Sedentary Men. Wayne Siegel, Gunnar Blomqvist, and Jere H. Mitchell

Predisposing Factors in Sudden Cardiac Death in Tecumseh, Michigan: A Prospective Study. Benjamin N. Chiang, Lawrence V. Perlmutter, Mary Fulton, Leon D. Ostrander, Jr., and Frederick H. Epstein

Heritable Q-T Prolongation Without Deafness. Leoncio A. Garza, Robert L. Vick, James J. Nora, and Dan G. McNamara

Dermatoglyphics in Congenital Heart Disease. Milton Alter and Robert Schulemburg


The Accuracy of Pulmonary Angiography in Assessing Resolution of Experimental Thromboemboli. Phillip S. Wolf and Edward Genten

Clinical Application of Serum Digitoxin Levels: A Simplified Plasma Determination. J. D. Bentley, G. H. Burnett, R. L. Conklin, and R. H. Wasserburger

Pervenous Pacing of the Specialized Conducting System in Man: His Bundle and A-V Nodal Stimulation. Onkar S. Narula, Benjamin J. Scherlag, and Philip Samet

Role of Renin in Acute Postural Homeostasis. Suzanne Oparil, Carlos Vassaux, Charles A. Sanders, and Edgar Haber

The Influence of Hypertonic Saline Infusions Upon the Fractional Reabsorption of Urate and Other Ions in Normal and Hypertensive Man. Paul J. Cannon, David S. Svahn, and Felix E. Demartini

(Continued)
Reduction of Serum Cholesterol and Triglyceride Levels by the Combined Administration of Neomycin and Clofibrate. Paul Samuel, Charles M. Holtzman, Edward Meilman, and Ignacy Sekowski  

Coarctation of the Aorta and Other Late Sequelae of Administration of Thorium Dioxide (Thorotrast). Gurdarshan S. Thind, Richard N. Harner, and Leon Kaseff  

Cerebral Symptoms in Pulmonary Arteriovenous Fistula: A Result of Paradoxical Emboli (?). Ronald J. Sisel, Brent M. Parker, and Om P. Bahl  


SPECIAL ARTICLE: 
Report of the Panels on Cardiovascular Drugs from the Drug Efficacy Study. Division of Medical Sciences, National Research Council  

BOOKS RECEIVED  
NEWS FROM THE AMERICAN HEART ASSOCIATION  
No. 2 (February)  

EDITORIALS: 
Cardiovascular Responses to Static Exercise (Isometrics, Anyone?). Alexander R. Lind  
Dependent and Obligatory Intracardiac Shunts in Congenital Heart Disease. Howard B. Burchell  

ORIGINAL ARTICLES: 
Relationship Between Quantitated Precordial Movement and Left Ventricular Function. George C. Sutton, Taylor A. Prewitt, and Ernest Craige  
Left Heart Volume and Mass Quantification in Children with Left Ventricular Pressure Overload. Thomas P. Graham, Jr., Barnett W. Lewis, M. M. Jarmakani, Ramon V. Canent, Jr., and M. Paul Capp  
Arterial Sodium Content in Experimental Congestive Heart Failure. Robert Zelis, Catherine S. Delea, Henry Neal Coleman, and Dean T. Mason  
Serial Hemodynamics after Renal Allotransplantation in Man. Samuel L. Kountz, Gary Truex, Laurence E. Earley, and Folkert O. Belzer  
Fluttering of the Mitral Valve in Aortic Insufficiency. Fred Winsberg, George E. Gabor, Joseph G. Hernberg, and Barry Weiss  
(Continued)
CONTENTS OF VOLUME XLII


The Genesis of QRS Changes Produced by Selective Coronary Arteriography. Orlando Maytin, Cesar Castillo, and Agustin Castellanos, Jr. 247


Skeletal Muscle Capillaries in Diabetics: A Quantitative Analysis. Rudolf Vracko ........................................................................... 271


Coronary ArteriographicAppearances in Patients with Left Bundle-Branch Block. C. Michael Lewis, Gilles R. Dagenais, Gottlieb C. Friesinger, and Richard S. Ross ...................................................... 299

Study of Nailfold Capillaries in Hypertriglyceridemia (Types III and IV Hyperlipoproteinemia). Peter T. Kuo, Louise Y. Feng, and José Pamintanu ........................................................................... 309

Aortic Regurgitation with Ventricular Septal Defect: Surgical Management and Clinical Features. Jane Somerville, A. Brandao, and Donald N. Ross ........................................................................... 317

Acute Alterations of Body Composition after Open Intracardiac Operations. Albert D. Pacifico, Stan Digerness, and John W. Kirklin 331

SPECIAL ARTICLE: The Changes in the Circulation After Birth: Their Importance in Congenital Heart Disease. Abraham M. Rudolph ................................................................. 343

BOOK REVIEWS ................................................................................. 361

NEWS FROM THE AMERICAN HEART ASSOCIATION ............................ 365

No. 3 (March)

EDITORIAL: Electrocardiographic Wave Form and the Nervous System. J. A. Abildskov ................................................................. 371


His Bundle Electrograms in Two Cases of Wolff-Parkinson-White (Pre-excitation) Syndrome. Agustin Castellanos, Jr., Eduardo Chapunoff, Cesar Castillo, Orlando Maytin, and Louis Lemberg 399

Function of Potential Bypass Tracts for Atrioventricular Conduction. Toyomi Sano, Fumio Suzuki, and Hiromichi Tsuchihashi 413

Studies on Ventriculo-Atrial Conduction and the Reentry Phenomenon. Anthony N. Damato, Sun H. Lau, and Gustavus A. Bobb 423

Analysis of the A-V Conduction Defect in Complete Heart Block Utilizing His Bundle Electrograms. Onkar S. Narula, Benjamin J. Scherlag, Roger P. Javier, Frank J. Hildner, and Philip Samet 437

(Continued)


Left Ventricular Systolic Time Intervals as Indices of Postural Circulatory Stress in Man. B. W. Stafford, W. S. Harris, and A. M. Weissler ........................................................................ 485

Ultrasonic Cardiac Echography for Determining Stroke Volume and Valvular Regurgitation. Richard L. Popp and Donald C. Harrison .... 493

Dynamics of Interatrial Shunting in Children with Obstruction of the Tricuspid and Pulmonic Valves. Aaron R. Levin, Madison S. Spach, Ramon V. Canent, Jr., and John P. Boineau ................ 503

Percutaneous Right and Left Heart Catheterization in Children: Experience with 1,000 Patients. Harvey Simovitch, Arno R. Hohn, Henry R. Wagner, Peter Vlad, S. Subramanian, and Edward C. Lambert ................................................................................ 513


Cardiac Performance After Diagnostic Coronary Arteriography. Shahbudin H. Rahimtoola, Gerald T. Gau, and Maurice J. Raphael ... 537

The Prognosis of an Abnormal Electrocardiographic Stress Test. Joseph T. Doyle and Sandra H. Kinch ........................................ 545


BOOK REVIEWS ........................................................................... 569

NEWS FROM THE AMERICAN HEART ASSOCIATION ................ 571

No. 4 (April)

EDITORIAL:
Effect of Potassium on A-V Conduction. Charles Fisch .............. 575

ORIGINAL ARTICLES:

Diminished Forearm Arteriolar Dilator Capacity Produced by Mineralocorticoid-Induced Salt Retention in Man: Implications Concerning Congestive Heart Failure and Vascular Stiffness. Robert Zelis and Dean T. Mason .... 589

(Continued)
### CONTENTS OF VOLUME XLI

<table>
<thead>
<tr>
<th>Title</th>
<th>Authors</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Left Ventricular Chamber Volume, Mass, and Function in Severe Coronary Artery Disease</td>
<td>Charles E. Rackley, H. Davis Dear, William A. Baxley, William B. Jones, and Harold T. Dodge</td>
<td>605</td>
</tr>
<tr>
<td>Identification of Ultrasound Echoes from the Left Ventricle by Use of Intracardiac Injections of Indocyanine Green</td>
<td>Harvey Feigenbaum, John M. Stone, Don A. Lee, William K. Nasser, and Sonia Chang</td>
<td>615</td>
</tr>
<tr>
<td>Peripheral Vascular Volumes and Whole Body Hematocrit During Human Heart Lung Bypass</td>
<td>Stanley Giannelli, Jr., Stephen M. Ayres, Peter Fleming, William Conrad, Melvin S. Schwartz, and Howard Gould</td>
<td>629</td>
</tr>
<tr>
<td>The Mechanism of Arterial Hypoxemia in Acute Myocardial Infarction</td>
<td>Yosvi Sukumalchantra, Ronald Danzig, Steven E. Levy, and H. J. C. Swan</td>
<td>641</td>
</tr>
<tr>
<td>The First Derivative Thoracic Impedance Cardiogram</td>
<td>Zuhdi Lababidi, D. A. Ehmke, Robert E. Durnin, Paul E. Leaverton, and Ronald M. Lauer</td>
<td>651</td>
</tr>
<tr>
<td>Estimation of Aortic Regurgitation by Diastolic Pulse Wave Analysis.</td>
<td>Terrance P. Judge and J. Ward Kennedy</td>
<td>659</td>
</tr>
<tr>
<td>Statistical Investigation of Correlations Between Serum Potassium Levels and Electrocardiographic Findings in Patients on Intermittent Hemodialysis Therapy</td>
<td>Peter P. Frohnhert, Emilio R. Giuliani, Mordecai Friedberg, William J. Johnson, and W. Newlon Tauxe</td>
<td>667</td>
</tr>
<tr>
<td>Juxtaposition of Atrial Appendages Associated with Normally Oriented Ventricles and Great Arteries.</td>
<td>Anton E. Becker and Mies J. Becker</td>
<td>685</td>
</tr>
<tr>
<td>Rapidly Recurring Supraventricular Tachycardia: A Manifestation of Reciprocating Tachycardia and an Indication for Propranolol Therapy</td>
<td>Leonard S. Gettes and Karl F. Yoshonis</td>
<td>689</td>
</tr>
<tr>
<td>Embolectomy for Chronic Pulmonary Embolism and Hypertension: Case Report and Review of the Problem</td>
<td>Gordon F. Moor and David C. Sabiston, Jr.</td>
<td>701</td>
</tr>
<tr>
<td>Long-Term Thiazide Therapy in Essential Hypertension: Evidence for Persistent Alteration in Plasma Volume and Renin Activity</td>
<td>Robert C. Tarazi, Harriet P. Dustan, and Edward D. Frohlich</td>
<td>709</td>
</tr>
<tr>
<td>BOOK REVIEWS</td>
<td></td>
<td>719</td>
</tr>
<tr>
<td>NEWS FROM THE AMERICAN HEART ASSOCIATION</td>
<td></td>
<td>723</td>
</tr>
<tr>
<td>Progress, Prospects and Provender.</td>
<td>Daniel Steinberg</td>
<td>723</td>
</tr>
</tbody>
</table>
No. 5 (May)

EDITORIAL:
Ventricular Patterns in Atrial Fibrillation. Daniel A. Brody .......... 733

ORIGINAL ARTICLES:
The Pre-Hospital Phase of Acute Myocardial Infarction. Arthur J. Moss and Sidney Goldstein ............... 737
Variations in Maximal Oxygen Intake with Physical Activity in Middle-Aged Men. John R. McDonough, Fusako Kusumi, and Robert A. Bruce .......... 743
Cardiac Transplantation in Man: VII. Cardiac Allograft Pathology. Charles P. Bieber, Edward B. Stinson, Norman E. Shumway, Rose Payne, and Jon Kosek ...... 753
Analysis of R-R Intervals in Patients with Atrial Fibrillation at Rest and During Exercise. Bert K. Bootsma, Adriaan J. Hoelen, Jan Strackee, and Frits L. Meijler .......... 783
The Effect of Pregnancy on the Murmurs of Mitral and Aortic Regurgitation. Frank I. Marcus, Gordon A. Ewy, Robert A. O'Rourke, Bernard Walsh, and Allan C. Bleich .......... 795
The Varying Clinical Spectrum of the Systolic Click-Late Systolic Murmur Syndrome: A Postural Auscultatory Phenomenon. Mary E. Fontana, Robert L. Pence, Richard F. Leighton, and Charles F. Wooley ........ 807
Complications of Left Heart Angiography: A Study of 1,000 Consecutive Cases. Charles H. Beckmann and Byron Dooley ........ 825
Arterial Thrombus Formation During Clinical Percutaneous Catheterization. Gustave Formanek, Robert S. Frech, and Kurt Amplatz .......... 833
Fusion of the Left Aortic Cusp to the Aortic Wall with Occlusion of the Left Coronary Ostium and Aortic Stenosis and Insufficiency. Menashe B. Waxman, Yihong Kong, Victor S. Behar, David C. Sabiston, Jr., and James J. Morris, Jr. ........ 849
Pulmonary Artery Agenesis: Diagnosis with Ventilation and Perfusion Scintigraphy. Morton C. Gluck and Kenneth M. Moser .......... 859
Sublingual Isosorbide Dinitrate Therapy Versus Sublingual Placebo in Angina Pectoris. Wilbert S. Aronow and Herman M. Chesluk ..... 869

BOOK REVIEWS .......... 885

(Continued)
CONTENTS OF VOLUME XLI

NEWS FROM THE AMERICAN HEART ASSOCIATION .......... 887
Report of Inter-Society Commission for Heart Disease Resources—
Table of Organization, Prevention of Cardiovascular Disease, In-
troduction, and Prevention of Rheumatic Fever .................. A1

No. 6 (June)

EDITORIAL:
The International Cooperative Study on Epidemiology. Oglesby Paul 895

ORIGINAL ARTICLES:
van Dam, G. E. Freud, M. J. Janse, F. L. Meijler, and R. C. Arzbaecher 899

Interpretation of Isopotential Surface Maps in Patients with Ostium
Primum and Secundum Atrial Defects. Richard B. Karsh, Madison
S. Spach, and Roger C. Barr .................. 913

Ventriculo-atrial Conduction in Man. Bruce N. Goldreyer and
J. Thomas Bigger, Jr. .......................... 935

Wenckebach and Mobitz Type II A-V Block Due to Block Within the
His Bundle and Bundle Branches. Onkar S. Narula and Philip Samet 947

Observations on Atrioventricular Conduction in Patients with Bilateral
Bundle-Branch Block. R. M. Schuilenburg and Dirk Durrer .......... 967

The Pattern of Onset and Spontaneous Cessation of Atrial Fibrillation
in Man. Michael A. Bennett and Brian L. Pentecost .................. 981

Experimental and Clinical Studies on Lactate and Pyruvate as
Indicators of the Severity of Acute Circulatory Failure (Shock).
Max Harry Weil and Abdelmonen A. Afifi .......................... 989

The Clinical Value of Frequency Analysis of the First Heart Sound in
Myocardial Infarction. Robert J. Adolph, John F. Stephens, and
Kumeo Tanaka .......................................... 1003

The Use of Apexcardiography in the Assessment of Left Ventricular
Diastolic Pressure. Gustav C. Voigt and Gottlieb C. Friesinger .... 1015

Distribution of Pulmonary Blood Flow after Myocardial Ischemia and
Infarction. Homayoun Kazemi, Edward F. Parsons, Laercio M.
Valencia, and Denise J. Strieder .......................... 1025

The Role of Left Atrial Transport in Aortic and Mitral Stenosis.
Donald K. Stott, Derek G. F. Marpole, J. David Bristow, Frank E.
Kloster, and Herbert E. Griswold .......................... 1031

Anomalous Left Coronary Artery from Pulmonary Artery: Report of
11 Cases; Review of Indications for and Results of Surgery. Lowell
W. Perry and Lewis P. Scott .................................. 1043

Catheterization of the Pulmonary Artery in Transposition of the
Great Arteries: A Simple Method. John M. Celermajer, Alex W.
Venables, and J. Denby Bowdler .................................. 1053

Serial Cardiac Catheterizations and Exercise Hemodynamics after
Correction of Tetralogy of Fallot: Average Follow-Up 13 Months
and 7 Years after Operation. J. David Bristow, Frank E. Kloster,
Martin H. Lees, Victor D. Menashe, Herbert E. Griswold, and
Albert Starr .............................................. 1057

(Continued)
CONTENTS OF VOLUME XLI

Anomalies Associated with Coarctation of Aorta: Particular Reference to Infancy. Anton E. Becker, Mies J. Becker, and Jesse E. Edwards . . 1067

SPECIAL ARTICLE:
Eradication of Rheumatic Fever: An Unfulfilled Hope. Milton Markowitz ................................................. 1077

BOOKS RECEIVED .................................................. 1085

BOOK REVIEWS ...................................................... 1089

NEWS FROM THE AMERICAN HEART ASSOCIATION .................. 1093

Report of Inter-Society Commission for Heart Disease Resources: Primary Prevention of Pulmonary Heart Disease, Primary Prevention of Congenital Heart Disease, Prevention and Early Detection of Thromboembolic Disease ........................................... A-17

Volume Author Index ................................................. 1097

Volume Subject Index ................................................. 1101