EDITORIAL:
From Bright Toward Light: The Story of Hypertension Research. George E. Wakerlin

ORIGINAL ARTICLES:
Clinical Diagnosis of Cardiac Involvement in Systemic Lupus Erythematosus: A Correlation of Clinical and Autopsy Findings in Thirty Patients. Thomas Q. Kong, Robert E. Kellum, and John R. Haserick
Complete Interruption of the Aortic Arch. William C. Roberts, Andrew G. Morrow, and Eugene Braunwald
Acyanotic Levocardia. Harold D. Rosenbaum, Edmund D. Pellegrino, and Leo J. Treeiokas
Cellular Infiltration of the Human Arterial Adventitia Associated with Atheromatous Plaques. C. J. Schwartz and J. R. A. Mitchell
The Scalar Electrocardiogram, Vectorcardiogram, and Exercise Electrocardiogram in the Assessment of Congenital Aortic Stenosis. Paul G. Hugenholtz, Martin M. Lees, and Alexander S. Nadas
Hemodynamic-Phonocardiographic Correlations of the Fourth Heart Sound in Aortic Stenosis. Allan Goldblatt, Maurice M. Aygen, and Eugene Braunwald
Hypertension due to Renal Artery Stenosis Caused by Abdominal Aortic Aneurysm. Successful Treatment by Nephrectomy. D. Gordon Abrahams and E. H. O. Parry
Partial Situs Inversus with Levocardia: An Unusual Combination of Anomalies. S. Padmavati and Savitri Gupta
Congenital Defect of the Pericardium: Its Resemblance to Pulmonary Artery Enlargement. Noble O. Fowler

CLINICAL PROGRESS:
The Mode of Action and Use of Chlorothiazide and Related Compounds. John H. Laragh

ABSTRACTS

NEWS FROM THE AMERICAN HEART ASSOCIATION

CONTRIBUTORS TO THIS ISSUE
CONTENTS OF VOLUME XXVI

No. 2

EDITORIAL:
Hypertrophic Subaortic Stenosis—A Broadened Concept. Eugene Braunwald, Edwin C. Brockenbrough, and Andrew G. Morrow

ORIGINAL ARTICLES:


Quantitative Radiocardiography. III. Results and Validation of Theory and Method. M. L. Lewis, C. Giuntini, L. Donato, R. M. Harvey, and A. Cournand

Abdominal Aortic Aneurysms. A Reappraisal. Irwin J. Schatz, John F. Fairbairn II, and John L. Juergens

Resection of Myocardial Aneurysms after Infarction during Temporary Cardiopulmonary Bypass. C. Walton Lillehei, Morris J. Levy, Richard A. DeWall, and Herbert E. Warden


Pressor Responses to Noxious Stimuli in Hypertensive Patients. Effects of Reserpine and Chlorothiazide. Alvin P. Shapiro

Thoracic Arterial Arch Anomalies. Hu A. Blake and William C. Manion

Congenital Absence of the Pulmonary Valve. The Clinical Syndrome of Tetralogy of Fallot with Pulmonary Regurgitation. Robert A. Miller, Maurice Lev, and Milton H. Paul


Congenital Saccular Aneurysms of the Aortic Ring. H. Edward MacMahon and Dieter H. Keller

CLINICAL PROGRESS:
The Present Role of Hypothermia in Cardiac Surgery. F. C. Spence and H. T. Bahnsen

ABSTRACTS ................................................................. 301

NEWS FROM THE AMERICAN HEART ASSOCIATION .................. 315

CONTRIBUTORS TO THIS ISSUE ........................................ 319

No. 3

EDITORIALS:
The Laboratory Control of Anticoagulant Therapy. Oscar D. Ratnoff

The Closed Chest Method of Cardiopulmonary Resuscitation. Benefits and Hazards

Circulation, Volume XXVI, December 1962
ORIGINAL ARTICLES:

Idiopathic Ventricular Septal Hypertrophy Causing Muscular Subaortic Stenosis. E. Douglas Wigle, Raymond O. Heimbeeker, and Ramsay W. Gunton...

The Response of the Abnormal Heart to Exercise. Réjane M. Harvey, William M. Smith, John O. Parker, and M. Irené Ferrer...

Paroxysmal Tachycardia after Exercise. Perry B. Miller and Lawrence W. Pollard

Myocardial Infarction Patterns in Young Subjects with Normal Coronary Arteriograms. William Likoff, Bernard Segal, and Leonard Dreifus...

Changes in Serum Lipids in Relation to Emotional Stress during Rigid Control of Diet and Exercise. Stewart Wolf, William R. McCabe, Joe Yamamoto, C. A. Adsett, and W. W. Schottstaedt...

The Supernormal Phase of Atrioventricular Conduction. I. Fundamental Mechanisms. A. Pick, R. Langendorf, and L. N. Katz...

Effects of Chlorothiazide on Systemic Hemodynamics in Essential Hypertension. Herman Villarreal, José Emilio Exaire, Andrés Revollo, and Jorge Soní

Effects of Chlorothiazide on Renal Hemodynamics. Comparative Study of Acute Administration in Normotensive and Hypertensive Subjects. Herman Villarreal, Andrés Revollo, José Emilio Exaire, and Francisco Larrondo...


The Diagnosis of Bilateral Stenosis of the Primary Pulmonary Artery Branches Based on Characteristic Pulmonary Trunk Pressure Curves. A Hemodynamic and Angiocardiographic Study. M. H. Agustsson, R. A. Arellas, B. M. Gasul, J. P. Bicoff, S. I. Nassif, and B. L. Lendrum...

Mitril Insufficiency Simulating Aortic Stenosis. Julian C. Sleeper, Edward S. Orgain, and Henry D. McIntosh...

Arteriovenous Aneurysm of Phrenic Vessels Simulating Cardiac Fistula. Ian R. Gray and H. Parry Williams...

SPECIAL ARTICLE:

Dr. George E. Fahr and His Era. Howard B. Sprague...

CLINICAL PROGRESS:

Shock: A Semantic Enigma. Robert F. Rushmer, Robert L. Van Citters, and Dean L. Franklin...

ABSTRACTS

NEWS FROM THE AMERICAN HEART ASSOCIATION

CONTRIBUTORS TO THIS ISSUE

No. 4

PART ONE

EDITORIAL:

Myocardial Infarction Becomes Emeritus. William Doek...

ORIGINAL ARTICLES:

Operative Results in Aortic Valve Surgery. Earle B. Kay, Akio Suzuki, and David Mendelsohn, Jr...
## CONTENTS OF VOLUME XXVI

<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Postpericardiotomy Syndrome. Its Relationship to Ambulation in the Presence of &quot;Benign&quot; Pericardial and Pleural Reaction. John B. McGuinness and Helen B. Taussig.</td>
<td>500</td>
</tr>
<tr>
<td>Angiocardiographic Measurement of the Cardiac Segment of the Inferior Vena Cava in Health and in Cardiovascular Disease. Edwin Ettinger and Israel Steinberg</td>
<td>508</td>
</tr>
<tr>
<td>Studies on Starling's Law of the Heart. VIII. Mechanical Properties of Human Myocardium Studied in Vivo. Maurice M. Aygen and Eugene Braunwald</td>
<td>516</td>
</tr>
<tr>
<td>Constrictive Pericarditis with Particular Reference to Etiology. Ross Robertson and Craig R. Arnold.</td>
<td>525</td>
</tr>
<tr>
<td>A Longitudinal Study of Blood Pressure. William R. Harlan, Robert K. Osborne, and Ashton Graybiel</td>
<td>530</td>
</tr>
<tr>
<td>Electrocardiogram and Spatial Vectorcardiogram of Localized Myocardial Hypertrophy. George E. Burch and Nicholas P. DePasquale</td>
<td>544</td>
</tr>
<tr>
<td>The Electrocardiographic Findings in Left Ventricular Hypertrophy and Dilatation. Louis A. Soloff and John W. Lawrence</td>
<td>553</td>
</tr>
<tr>
<td>Congenital Stenosis of Individual Pulmonary Veins. John D. Shone, Kurt Amplatz, Ray C. Anderson, Paul Adams, Jr., and Jesse E. Edwards</td>
<td>574</td>
</tr>
</tbody>
</table>

**SPECIAL ARTICLE:**

The Electrical Potential Difference Across the Cell Membrane of Heart Muscle. Biophysical Considerations. Ernest Page | 582  |

**CLINICAL PROGRESS:**

Proteolysis, Fibrinolysis, and Coagulation. Significance in Thrombolytic Therapy. Benjamin Alexander, Liberto Pechet, and Allan Kliman | 596  |

**COMMITTEE REPORT:**

Report on the Effect of Strain and Trauma on the Heart and Great Vessels. Committee of the Council on Community Service and Education of the American Heart Association | 612  |

**ABSTRACTS** | 623  |

**NEWS FROM THE AMERICAN HEART ASSOCIATION** | 636  |

**CONTRIBUTORS TO THIS ISSUE** | 639  |

**PART TWO**

ABSTRACTS, American Heart Association, 35th Annual Scientific Sessions, and 16th Annual Meeting, Council on Arteriosclerosis | 641  |

**No. 5**

**PART ONE**

**EDITORIAL:**

On the Etiology of Calcific Aortic Stenosis. Jesse E. Edwards | 817  |
CONTENTS OF VOLUME XXVI

ORIGINAL ARTICLES:
The Morphogenesis of Transposition of the Great Vessels. Robert P. Grant. 819

The Natural History of Atherosclerosis. Marcel V. Vastesaeger and R. Delecourt. 841


Studies of Fat Absorption in Patients with Hypercholesterolemia and in Patients with Coronary Artery Disease. Bennett Levine and Herschel Cohen. 873

Ventricular Fusion Beats. Henry J. L. Marriott, Neil L. Schwartz, and Harold H. Bix. 880

Clinical Syndrome of Anomalous Position of the Popliteal Artery. Differentiation from Juvenile Arteriopathy. Manfredi Servello. 885

The Orthogonal Vectorcardiogram in 100 Normal Children (Frank System). With Some Comparative Data Recorded by the Cube System. Paul G. Hugenholtz and Jerome Liebman. 891


Posterior Rotation of the Atrial Vector. An Electrocardiographic Sign of Left Heart Failure. Alton I. Sutnick and Louis A. Soloff. 913

Some Regulatory Mechanisms of the Human Pulmonary Vascular Bed. Celia Oakley, Gerald Glick, Milton N. Luria, Bernard F. Schreiner, Jr., and Paul N. Yu. 917


SPECIAL ARTICLE:
Oxidation Reduction in Heart Muscle. Theoretical and Clinical Considerations. S. Gudbjarnason, R. O. Hayden, V. E. Wendt, T. B. Stock, and R. J. Bing. 937

CLINICAL PROGRESS:
Problems in the Electrocardiographic Diagnosis of Ventricular Enlargement. Thomas W. Parkin. 946

ABSTRACTS ................................................................. 958

NEWS FROM THE AMERICAN HEART ASSOCIATION .................. 972

CONTRIBUTORS TO THIS ISSUE ........................................ 975

PART TWO

SYMPOSIUM ON THE PLASMA MEMBRANE ................................ 977

EDITORIAL:
By U. S. von Euler ................................................. 1233

ORIGINAL ARTICLES:
Supravalvular Aortic Stenosis in Association with Mental Retardation and a Certain Facial Appearance. A. J. Beuren, J. Apitz, and D. Harmjanz. 1235

Mitral Regurgitant Flow and Left Ventricular Function in Patients with Mitral Valve Disease. Anthony D. Jose and L. Bernstein. 1241
The Significance of Asplenia in the Recognition of Inoperable Congenital Heart Disease. William C. Roberts, William B. Berry, and Andrew G. Morrow...... 1251


Quadrilateral Peripheral Vascular Disease in the Young Adult. Falls B. Hershey, Morton D. Pareira, and Robert C. Ahlvin...... 1261

The Effects of Surgical Abolition of Left-to-Right Shunts on the Pulmonary Vascular Dynamics of Patients with Pulmonary Hypertension. Nina S. Braunwald, Eugene Braunwald, and Andrew G. Morrow......... 1270


The Apical First Heart Sound as an Aid in the Diagnosis of Atrial Septal Defect. Jose F. Lopez, Harold Linn, and Aaron B. Shaffer...... 1296

Physiologic Studies Following Surgical Correction of Atrial Septal Defect and Similar Lesions. Kai Rehder, John W. Kirklain, and Richard A. Theye...... 1302

Use of Bayes' Theorem in Ophthalmodynamometry. E. F. Vastola and T. Kokubu ........................................... 1312


SPECIAL ARTICLE:
Patterns of Disease, Controlled Populations, and Experimental Design. Herbert L. Ratcliffe and Robert L. Snyder.................. 1352

CLINICAL PROGRESS:

ABSTRACTS .................................................................. 1370

NEWS FROM THE AMERICAN HEART ASSOCIATION................. 1386

CONTRIBUTORS TO THIS ISSUE.................................... 1390

VOLUME AUTHOR INDEX ........................................ 1393

VOLUME SUBJECT INDEX ........................................ 1395

Circulation, Volume XXVI, December 1962