

BRITISH HEART JOURNAL

Editor: K. SHIRLEY SMITH

Assistant Editor: WALTER SOMERVILLE

Editorial: Electrocardiography Misused. By K. SHIRLEY SMITH	1
Natural History of Persistent Ductus Arteriosus. By MAURICE CAMPBELL ...	4
Causes of Death in Patients with Complete Heart Block and Artificial Pacemakers. By A. HARRIS, D. REDWOOD, M. DAVIES, AND G. DAVIES	14
Electrocardiographic Findings in Patients with Complete Atrioventricular Block. By JOSE F. LOPEZ	20
Implantable Demand Pacemaker. By A. CASTELLANOS, JR., L. LEMBERG, J. R. JUDE, K. MOBIN-UDDIN, AND B. V. BERKOVITS	29
Aetiology of Bundle-branch Block. By R. MULCAHY, N. HICKEY, AND B. MAURER	34
Haemodynamic Effects of Isopropylnoradrenaline Sulphate (Isoprenaline) Following Aortic Valve Homograft Replacement. By L. RESNEKOV, R. FORDHAM, AND D. ROSS	38
Haemodynamic Effects of Beta-adrenergic Blockade. By HANS ÅSTRÖM ...	44
Cardio-circulatory Effects of Beta-adrenergic Blockade in Organic Heart Disease. By T. GRANDJEAN AND J. L. RIVIER	50
Haemodynamic Effects of Exercise in Isolated Pulmonary Stenosis Before and After Surgery. By BENGT JONSSON AND SIMON J. K. LEE... ..	60
Quadracuspid Pulmonary Valve. By B. ANTHONY ENOCH... ..	67
Vectorcardiographic Evolution of Left Ventricular Hypertrophy. By H. BELL, D. PUGH, AND M. DUNN	70
Left Atrial Function After Electrical Conversion to Sinus Rhythm. By H. IKRAM, P. G. F. NIXON, AND T. ARCAN	80
Factors Affecting Cardioversion of Atrial Arrhythmias with Special Reference to Quinidine. By JOHN I. HALL AND DAVID R. WOOD	84
Long-term Results of DC Reversion of Atrial Fibrillation. By M. D. RADFORD AND D. W. EVANS	91
Right Atrial Electrocardiogram in the Analysis of Arrhythmias Following Acute Myocardial Infarction. By D. E. JEWITT, Y. KISHON, M. THOMAS AND J. P. SHILLINGFORD	97
Regional Venous Drainage of the Human Heart. By WILLIAM B. HOOD, JR. ...	105
Aberrant Left Pulmonary Artery. By P. M. TAN, T. F. LOH, N. K. YONG, AND K. SUGAI	110
Atrial Septal Defect in Patients Over 45 Years of Age. Merits of Surgical Versus Medical Therapy. By P. S. WOLF, J. H. K. VOGEL, R. PRYOR, AND S. GILBERT BLOUNT, JR.	115
Circulatory Haemodynamics After Blood Transfusion in Chronic Severe Anaemia. By L. M. SANGHVI, K. C. KOTIA, S. K. SHARMA, A. K. BORDIA, AND Y. P. JAIN	125
Obituary: CHARLES FREDERICK TERENCE EAST... ..	130
Case Reports	
Tuberous Sclerosis Presenting as Cardiac Arrhythmia. By THOMAS R. TAYLOR	132
Rupture of the Right Ventricle in Acute Myocarditis. By E. STOCK AND T. LUBBE	135
Abnormal Electrocardiogram After Adder Bite. By J. S. CHADHA, D. W. ASHBY, AND J. O. BROWN	138
Situs Inversus with Cor Triloculare Biatrimum and a Single Arterial Trunk. By J. P. P. STOCK AND C. GILES	141

BRITISH MEDICAL ASSOCIATION, TAVISTOCK SQUARE, LONDON W.C.1

YEARLY SUBSCRIPTION (6 NUMBERS) INLAND £4 4s. ABROAD £4 15s. SINGLE NUMBER 18s. 6d.

CONTENTS OF VOLUME 30

Number 1		page
EDITORIAL: ELECTROCARDIOGRAPHY MISUSED.	By K. Shirley Smith	1
NATURAL HISTORY OF PERSISTENT DUCTUS ARTERIOSUS.	By Maurice Campbell	4
CAUSES OF DEATH IN PATIENTS WITH COMPLETE HEART BLOCK AND ARTIFICIAL PACE-MAKERS	By A. Harris, D. Redwood, M. Davies, and G. Davies	14
ELECTROCARDIOGRAPHIC FINDINGS IN PATIENTS WITH COMPLETE ATRIOVENTRICULAR BLOCK	By Jose F. Lopez	20
IMPLANTABLE DEMAND PACEMAKER.	By A. Castellanos, Jr., L. Lemberg, J. R. Jude, K. Mobin-Uddin, and B. V. Berkovits	29
AETIOLOGY OF BUNDLE-BRANCH BLOCK.	By R. Mulcahy, N. Hickey, and B. Maurer	34
HAEMODYNAMIC EFFECTS OF ISOPROPYLNORADRENALINE SULPHATE (ISOPRENALINE) FOLLOWING AORTIC VALVE HOMOGRAFT REPLACEMENT	By L. Resnekov, R. Fordham, and D. Ross	38
HAEMODYNAMIC EFFECTS OF BETA-ADRENERGIC BLOCKADE	By Hans Åström	44
CARDIO-CIRCULATORY EFFECTS OF BETA-ADRENERGIC BLOCKADE IN ORGANIC HEART DISEASE	By T. Grandjean and J. L. Rivier	50
HAEMODYNAMIC EFFECTS OF EXERCISE IN ISOLATED PULMONARY STENOSIS BEFORE AND AFTER SURGERY	By Bengt Jonsson and Simon J. K. Lee	60
QUADRICUSPID PULMONARY VALVE	By B. Anthony Enoch	67
VECTORCARDIOGRAPHIC EVOLUTION OF LEFT VENTRICULAR HYPERTROPHY	By H. Bell, D. Pugh, and M. Dunn	70
LEFT ATRIAL FUNCTION AFTER ELECTRICAL CONVERSION TO SINUS RHYTHM	By H. Ikram, P. G. F. Nixon, and T. Arcan	80
FACTORS AFFECTING CARDIOVERSION OF ATRIAL ARRHYTHMIAS WITH SPECIAL REFERENCE TO QUINIDINE	By John I. Hall and David R. Wood	84
LONG-TERM RESULTS OF DC REVERSION OF ATRIAL FIBRILLATION	By M. D. Radford and D. W. Evans	91
RIGHT ATRIAL ELECTROCARDIOGRAM IN THE ANALYSIS OF ARRHYTHMIAS FOLLOWING ACUTE MYOCARDIAL INFARCTION	By D. E. Jewitt, Y. Kishon, M. Thomas, and J. P. Shillingford	97
REGIONAL VENOUS DRAINAGE OF THE HUMAN HEART	By William B. Hood, Jr.	105
ABERRANT LEFT PULMONARY ARTERY	By P. M. Tan, T. F. Loh, N. K. Yong, and K. Sugai	110
ATRIAL SEPTAL DEFECT IN PATIENTS OVER 45 YEARS OF AGE, MERITS OF SURGICAL VERSUS MEDICAL THERAPY	By P. S. Wolf, J. H. K. Vogel, R. Pryor, and S. Gilbert Blount, Jr.	115
CIRCULATORY HAEMODYNAMICS AFTER BLOOD TRANSFUSION IN CHRONIC SEVERE ANAEMIA	By L. M. Sanghvi, K. C. Kotia, S. K. Sharma, A. K. Bordia, and Y. P. Jain	125
OBITUARY: CHARLES FREDERICK TERENCE EAST		130
CASE REPORTS		132, 135, 138, 141
Number 2		
EDITORIAL: SMOKING AND ISCHAEMIC HEART DISEASE	By Samuel Oram	145
THROMBOSIS IN CORONARY HEART DISEASE	By Lawson McDonald	151
EXPERIENCE WITH HYDROGEN IN THE DETECTION OF INTRACARDIAC SHUNTS	By J. F. Robinson, N. Restieaux, and M. Murray	168
THE FRANK VECTORCARDIOGRAM IN NORMAL MEN. NORMS DERIVED FROM VISUAL AND MANUAL MEASUREMENT OF 300 RECORDS	By A. F. Lyon and D. A. Belletti	172
LEFT VENTRICULAR CINE-ANGIOCARDIOGRAPHY IN ENDOCARDIAL CUSHION DEFECT	By M. S. Gotsman, W. Beck, and V. Schrire	182
LEFT HEART HAEMODYNAMICS AT REST AND DURING EXERCISE IN PATIENTS WITH MITRAL STENOSIS	By J. Kasalický, J. Hurych, J. Widimský, R. Dejdar, R. Metyš, and V. Staněk	188
CHRONIC LEFT COMPLETE BUNDLE-BRANCH BLOCK. PHONOCARDIOGRAPHIC AND MECHANOCARDIOGRAPHIC STUDY OF 30 CASES	By J. Baragan, F. Fernandez-Caamano, Y. Sozutek, B. Coblenca, and J. Lenègre	196
LATE SYSTOLIC MURMURS AND NON-EJECTION ("MID-LATE") SYSTOLIC CLICKS. AN ANALYSIS OF 90 PATIENTS	By J. B. Barlow, C. K. Bosman, W. A. Pocock, and P. Marchand	203
CHANGES IN CHEST RADIOGRAPH AFTER AORTIC VALVE REPLACEMENT	By M. S. Gotsman, W. Beck, C. N. Barnard, and V. Schrire	219

	Number 2—(continued)	page
IDIOPATHIC CARDIOMEGALY IN CEYLON. CONGESTIVE CARDIAC FAILURE, CARDIOMEGALY, HEPATOMEGALY, AND PORTAL FIBROSIS ASSOCIATED WITH MALNUTRITION	By Ivor Obeyesekere	226
RADIOLOGICAL ABNORMALITIES IN PATIENTS WHO HAVE SURVIVED A MYOCARDIAL INFARCTION. THEIR POSSIBLE RELATIONSHIP TO ANEURYSM FORMATION	By B. M. Groden and W. B. James	236
ELECTROMYOGRAM OF RESPIRATORY MUSCLES REGISTERED IN THE ORDINARY ELECTROCARDIOGRAM	By P. Fleischmann and Y. Bar-Khayim	242
CONGENITAL MITRAL ATRESIA	By J. Summerell, C. Miller, V. Persaud, and A. Talerman	249
PULMONARY STENOSIS IN THE FIRST YEAR OF LIFE	By W. T. Mustard, S. C. Jain, and G. A. Trusler	255
ABSENT SIXTH AORTIC ARCH: A FORM OF PULMONARY ATRESIA	By D. Stuckey, J. D. Bowdler, and R. D. K. Reye	258
ELECTRON MICROSCOPY OF THE HEART IN A CASE OF PRIMARY CARDIAC AMYLOIDOSIS	By E. M. Husband, and R. Lannigan	265
JUXTAPOSITION OF THE ATRIAL APPENDAGES. A SIGN OF SEVERE CYANOTIC CONGENITAL HEART DISEASE	By Barbara P. P. Melhuish and Richard Van Praagh	269
CASE REPORTS		285, 288

Number 3

EDITORIAL: THE HEART AT HIGH ALTITUDE	By Frederic Jackson	291
MODE OF ACTION OF NITROGLYCERIN IN ANGINA PECTORIS. CORRELATION BETWEEN HAEMODYNAMIC EFFECTS DURING EXERCISE AND PREVENTION OF PAIN	By Brian F. Robinson	295
STUDIES IN BLOOD COAGULATION, DIET, AND ISCHAEMIC HEART DISEASE IN TWO POPULATION GROUPS IN INDIA	By S. L. Malhotra	303
CLINICAL FEATURES OF ENDOMYOCARDIAL FIBROSIS OF THE RIGHT VENTRICLE	By K. Somers, D. P. Brenton, and N. K. Sood	309
HAEMODYNAMIC FEATURES OF SEVERE ENDOMYOCARDIAL FIBROSIS OF RIGHT VENTRICLE, INCLUDING COMPARISON WITH CONSTRICTIVE PERICARDITIS	By K. Somers, D. P. Brenton, P. G. D'Arbela, J. M. Fowler, B. R. Kanyerezi, and N. K. Sood	322
TECHNIQUE FOR INSERTION OF AN INDWELLING INTRAPERICARDIAL CATHETER	By R. A. Massumi, J. C. Rios, A. M. Ross, and G. A. Ewy	333
PRIMARY PULMONARY HYPERTENSION: FAMILIAL OCCURRENCE	By W. B. Hood, Jr., H. Spencer, R. W. Lass, and R. Daley	336
SOME OBSERVATIONS ON HAEMATOCRIT CHANGES IN PATIENTS WITH ACUTE MYOCARDIAL INFARCTION	By L. Sedziwy, M. Thomas, and J. Shillingford	344
HAEMODYNAMIC EFFECTS OF INTRAVENOUS ADRENALINE SULPHATE FOLLOWING AORTIC VALVAR HOMOGRAFT REPLACEMENT	By R. M. M. Fordham, L. Resnekov, and J. Paddle	350
LARGE TONSILS AND ADENOIDS IN SMALL CHILDREN WITH COR PULMONALE	By Lorin E. Ainger	356
VENTRICULAR-TRIGGERED PACEMAKERS: CLINICAL EXPERIENCE	By Edgar Sowton	363
CARDIOVASCULAR DISEASE IN AIR TRAVELLERS	By Peter H. Beighton and Peter R. Richards	367
HAEMODYNAMIC EFFECTS OF RAPID DIGITALIZATION FOLLOWING ACUTE MYOCARDIAL INFARCTION	By Raphael Balcon, Judy Hoy, and Edgar Sowton	373
ABO BLOOD GROUPS AND ISCHAEMIC HEART DISEASE IN MEN	By T. M. Allan and Audrey A. Dawson	377
MYOCARDIAL METASTASES. A PATHOLOGICAL AND ELECTROCARDIOGRAPHIC STUDY	By Thorbjörn Berge and Jan Sievers	383
NECROPSY STUDY OF ENDOMYOCARDIAL FIBROSIS AND RHEUMATIC HEART DISEASE IN UGANDA 1950-1965	By A. G. Shaper, M. S. R. Hutt, and R. M. Coles	391
LEFT HEART CATHETERIZATION BY DIRECT VENTRICULAR PUNCTURE	By T. Semple, J. B. McGuinness, and H. Gardner	402
ACUTE EFFECT OF NITROGLYCERIN ON HAEMODYNAMICS OF ANGINA PECTORIS	By M. Arborelius, Jr., H. Lecerof, A. Malm, and R. O. Malmberg	407
WAVE AMPLITUDE RELATIONSHIPS IN THE NORMAL ELECTROCARDIOGRAM	By Leon Michaels and John E. Klován	412
PROCEEDINGS OF THE BRITISH CARDIAC SOCIETY		419
CASE REPORTS		429, 432, 436, 440

Number 4		page
EDITORIAL: CARDIAC WORK AND CONTRACTILITY	By J. Hamer	443
LEFT VENTRICULAR ANGIOCARDIOGRAPHY IN ATRIOVENTRICULAR DEFECTS	By Jane Somerville and Keith Jefferson	446
ATRIOVENTRICULAR DISSOCIATION WITH INTACT RETROGRADE CONDUCTION	By Evan Fletcher and Patricia Morton	458
ELECTROCARDIOGRAPHIC CORRELATION OF ANATOMICAL AND HAEMODYNAMIC DATA IN OSTIUM PRIMUM ATRIAL SEPTAL DEFECTS	By H. E. Kulbertus, J. J. Coyne, and K. A. Hallidie-Smith	464
ELECTROCARDIOGRAPHY AND VECTORCARDIOGRAPHY IN RIGHT VENTRICULAR HYPERTROPHY FROM CHRONIC BRONCHITIS	By I. K. Brown	470
LEFT VENTRICULAR VOLUME IN AORTIC STENOSIS MEASURED BY AN ANGIOCARDIOGRAPHIC AND A THERMODYLUTION METHOD	By James Fleming and John Hamer	475
ASPECTS OF APPLIED PHYSIOLOGY OF NEONATAL CIRCULATION	By K. W. Cross	483
RELATION BETWEEN METABOLIC ACIDOSIS AND CARDIAC DYSRHYTHMIAS IN ACUTE MYOCARDIAL INFARCTION	By R. Anderson, F. V. Gardner, H. Honey, I. M. Noble, and D. W. Woodgate	493
CLINICAL DIAGNOSIS AND PROGNOSIS OF VENTRICULAR ANEURYSM	By Ath. Mourdjinis, E. Olsen, M. J. Raphael, and J. P. D. Mounsey	497
THE NATURAL HISTORY OF CONGENITAL AORTIC STENOSIS	By Maurice Campbell	514
NORMAL AND DISEASED VASCULAR PATTERN OF MYOCARDIUM OF HUMAN HEART. I. NORMAL PATTERN IN THE LEFT VENTRICULAR FREE WALL	By Geoffrey Farrer-Brown	527
NORMAL AND DISEASED VASCULAR PATTERN OF MYOCARDIUM OF HUMAN HEART. II. PATTERN SEEN WITH FIBROSIS OF THE LEFT VENTRICULAR FREE WALL	By Geoffrey Farrer-Brown	537
NEW CONCEPTS OF INTRAMURAL MYOCARDIAL CONDUCTION IN HYPERTROPHIC OBSTRUCTIVE CARDIOMYOPATHY	By James J. Coyne	546
RETINAL ARTERY CHANGES CORRELATED WITH OTHER HYPERTENSIVE PARAMETERS IN A CORONARY HEART DISEASE CASE-HISTORY STUDY	By P. O'Sullivan, N. Hickey, B. Maurer, Philomena Guinan, and R. Mulcahy	556
TOTAL CORRECTION OF TETRALOGY OF FALLOT: REVIEW OF TEN YEARS' EXPERIENCE	By B. S. Goldman, W. T. Mustard, and G. S. Trusler	563
CASE REPORTS		569, 571, 575, 579, 582

Number 5		
EDITORIAL: IMPLANTABLE CARDIAC PACEMAKERS	By Edgar Sowton	587
THE 'A' WAVE OF THE APEX CARDIOGRAM IN AORTIC VALVE DISEASE AND CARDIOMYOPATHY	By E. J. Epstein, N. Coulshed, A. K. Brown, and N. G. Doukas	591
CALCIFIC AORTIC STENOSIS AND CONGENITAL BICUSPID AORTIC VALVES	By Maurice Campbell	606
SCALAR, VECTOR, AND INTRACARDIAC ELECTROCARDIOGRAMS IN EBSTEIN'S ANOMALY	By K. G. Lowe, D. Emslie-Smith, P. G. C. Robertson, and Hamish Watson	617
EPICARDIAL AND INTRAMURAL EXCITATION OF NORMAL HEART IN SIX PATIENTS 50 YEARS OF AGE AND OLDER	By J. P. Roos, R. Th. van Dam, and D. Durrer	630
HAEMODYNAMIC EFFECTS OF ETHYL ALCOHOL IN PATIENTS WITH CORONARY HEART DISEASE	By Neville Conway	638
ATRIOVENTRICULAR DEFECTS—A STUDY OF 92 FAMILIES	By Richard Emanuel, Jane Nichols, Janet M. Anders, Elizabeth C. Moores, and Jane Somerville	645
SITE OF PULMONARY RESISTANCE IN COR PULMONALE IN CHRONIC BRONCHITIS	By F. Herles, V. Ježek, and S. Daum	654
OBSERVER VARIABILITY IN RECORDING THE PERIPHERAL PULSES	By T. W. Meade, M. J. Gardner, P. Cannon, and P. C. Richardson	661
MECHANICAL PERFORMANCE OF HAMMERSMITH MITRAL VALVE PROSTHESIS	By E. B. Raftery, M. K. A. Dayem, and D. G. Melrose	666
CHRONIC HAEMOLYSIS FOLLOWING INSERTION OF BALL VALVE PROSTHESES	By M. H. Yacoub and D. H. Keeling	676
VASCULAR PATTERN OF MYOCARDIUM OF RIGHT VENTRICLE OF HUMAN HEART	By Geoffrey Farrer-Brown	679
CARDIAC PATHOLOGY AND SYSTOLIC MURMURS IN THE ELDERLY	By Ariela Pomerance	687
MEASUREMENT OF RIGHT VENTRICULAR END-SYSTOLIC AND END-DIASTOLIC VOLUMES BY THE THERMODYLUTION TECHNIQUE	By Raphael Balcon and Samuel Oram	690

Number 5—(continued)		page
INTRACARDIAC ELECTROCARDIOGRAM IN ENDOMYOCARDIAL FIBROSIS	By D. Emslie-Smith and K. Somers	696
ELECTIVE CIRCULATORY ARREST WITH CONTINUOUS CORONARY PERFUSION DURING NEUROSURGICAL OPERATIONS	By P. H. Davison, D. J. S. McIlveen, J. M. Small, and V. Campkin	705
CONGENITAL ANOMALIES IN THE HEART WITH HYPERTROPHIC CARDIOMYOPATHY	By Jane Somerville and Lawson McDonald	713
CASE REPORTS		723, 726, 729, 732

Number 6		
EDITORIAL: EXAMINATION OF THE VALIDITY OF THE CONCEPT OF VECTORCARDIOGRAPHY	By Arthur Skowron	735
SECOND HEART SOUND IN NORMAL SUBJECTS	By Alan Harris and George Sutton	739
SECOND HEART SOUND IN PULMONARY HYPERTENSION	By George Sutton, Alan Harris, and Aubrey Leatham	743
SPLITTING OF SECOND HEART SOUND IN VENTRICULAR ECTOPIC BEATS	By A. Oriol, O. Papp, and G. Sanz	757
ELECTROCARDIOGRAMS IN YOUNG CEYLONESE	By K. Dharmadasa and M. Nadarajah	765
PRIMARY PULMONARY HYPERTENSION, CEREBROVASCULAR MALFORMATION, AND LYMPHOEDEMA FEET IN A FAMILY	By Prabha Avasthey and Sujoy B. Roy	769
ACQUIRED PULMONARY STENOSIS	By John Seymour, Richard Emanuel, and Norman Pattinson	776
APPRAISAL OF ELECTROCONVERSION IN TREATMENT OF CARDIAC DYSRHYTHMIAS	By Leon Resnekov and Lawson McDonald	786
PHONOCARDIOGRAPHIC FINDINGS IN PERSISTENT TRUNCUS ARTERIOSUS	By Benjamin E. Victorica, Ira H. Gessner, and Gerold L. Schiebler	812
ANTICOAGULANT TREATMENT IN CORONARY HEART DISEASE	By G. Riddell Royston	817
HAEMODYNAMIC EFFECTS OF NITROGLYCERIN IN PATIENTS WITH MITRAL VALVULAR DISEASE	By B. Christensson, A. Gustafson, H. Westling, and G. Wigand	822
HYPERTROPHIC CARDIOMYOPATHY	By N. B. Karatzas, J. Hamill, and P. Sleight	826
ALTERATIONS IN INTENSITY OF HEART SOUNDS AFTER MYOCARDIAL INFARCTION	By W. H. Price and A. E. Brown	835
DISSECTING ANEURYSM OF THE AORTA DUE TO GIANT CELL ARTERITIS	By M. Harris	840
VENTRICULAR SEPTAL DEFECT REPAIR IN CHILDHOOD	By E. N. Coleman, J. M. Reid, J. A. Inall, and J. G. Stevenson	845
ENDOCARDIAL FIBRO-ELASTOSIS, MITRAL INCOMPETENCE, AND COARCTATION OF ABDOMINAL AORTA. A REPORT OF THREE SIBS	By K. A. Hallidie-Smith and E. G. J. Olsen	850
ELECTROCARDIOGRAPHIC PATTERNS OF RESPIRATORY DISEASE IN A WORKING POPULATION	By R. J. Prineas, G. Tibblin, and G. Rose	859
A COMBINED MEDICAL AND SURGICAL UNIT FOR CARDIAC SURGERY. REPORT OF THE JOINT CARDIOLOGY COMMITTEE		864
PROCEEDINGS OF THE BRITISH CARDIAC SOCIETY		869
CASE REPORT		875
STATEMENT BY THE EXECUTIVE COMMITTEE OF THE INTERNATIONAL SOCIETY OF CARDIOLOGY		878
INDEX		879