Permanent Programme Committee of the International Congresses on Electrocardiology

Preface

Introduction to the Scientific Programme. Aims and Purposes of Electrocardiological Research, P. Rijlant (Brussels): 5

I. Physiological Correlations of the Heart Generator System, the Electrical Properties of the Heart and Body Structures

Lauflberger, V. (Praha): Theory of Cardioelectric Space 10

Amirov, R.Z. (Moscow): Heart Dipole Circular Movement as Revealed by Topographic Study 12

Titomir, L.I. (Moscow): Integral Characteristics of the Cardiac Electrical Generator 14

Tuna, N. and Cl.E. Liedtke (Minneapolis, Minn.): Correlations between the Electrocardiogram and Age, Height, Body Weight and Chest Circumference 17

Roshchevsky, M.P.; Shmakov, D.N., and Kraft, A.V. (Syktyvkar): Correlation between the Character of Excitation Wave Distribution in the Heart Ventricles, of Body Shape, and Surface Cardiac Electric Fields 21


Prosheva, V.I.; Klushina, I.V., and Roshchevsky, M.P. (Syktyvkar): Electrophysiological Characteristic of Avian Myocardial Subendocardial Layers 26
Schwartze, H. (Leipzig): Effect of Different Perfusion Pressures on the Excitation Spreading Pattern of Isolated Guinea Pig Hearts from Transitional and Adult Type Circulations 29

Contents VI

Préda, I. (Budapest) and d’Alche, P. (Caen): On the Temperature Dependence of Dogs Cardiac Activation 33

Schennetten, F. and Bredow, H. (Berlin): Relationship of Lustrous Striae, Z Striae and Weight of the Heart to the Frequency of the Electrocardiogram 38

Pedich, W. (Bialystock): Application of Wroclaw Taxonomy for Evaluation of the Similarity between Electrocardiograms from Twins 42


Manoach, M.; Aygen, M.; Netz, H., and Pauker, T. (Tel-Aviv): Q-T Interval in Young and Old Mammalian Embryos 52

Schönberger, W. and Scheidt, E. (Mainz): Correlations of Vectorcardiographic Parameters with Constitutional Variables in the First Year of Life 55

Vitanova, M. (Sofia): On the Specific Features of the Vectorcardiogram in Children 58

Vassilev, J. (Varna): On the Vectorcardiographic Changes in Adults 61

Eckoldt, K. and Eismann, V. (Berlin): Variability of RR, PR and RT of the ECG at Rest and Work 65

Moumdjiev, N. (Plovdiv): Some Specific Features of the Corrected Orthogonal Electrocardiographic System in Childhood 68

Popiliev, I. and Bozhkov, B. (Sofia): VCG Investigation before and after Delivery 71

II. Distribution of Body Surface Potentials and Mapping

Schubert, E.; Engst, M.; Kästner, R., and Mohinke, K. (Berlin): Averaged Cardioelectric Field Maps in Repolarization 73

Taccardi, B.; Macchi, E., and de Ambroggi, L. (Milano): Automated Mapping of Body Surface and Pericardial Potentials in Experimental Myocardial Infarction 75

D’Alche, P. and Préda, I. (Caen): Distribution of Cardiac Thoracic Potentials on the Dog in Hypothermia 77
Drška, Z.; Svoboda, P., and Novak, V. (Praha): Maps of Potential Peak Courses Corresponding to Vectorcardiograms 84
Ambroggi, L. de; Macchi, E.; Brusoni, B., and Taccardi, B. (Milano): Electromaps during Ventricular Recovery in Angina Patients with Normal Resting ECG 88
Kienle, F.A.N. (Karlsruhe): Vector Maps and ECG in Left Bundle Branch Block and in Right Bundle Branch Block and in Intraventricular Conduction Disturbances and their Physiological Meaning 91

Contents VII

III. Methodology and Basic Problems of ECG and VCG Research

Lopes, M.G.; Rocha, E.; Lopes, V.M.; dos Reis, D.D., and Pádua, F. de (Lisboa): Long-Term Prognosis of the Left Anterior Hemiblock 115
Lopes, V.M.; Lopes, M.G., and Pádua, F. de (Lisboa): Left Posterior Hemiblock: A new Cause of Mitral Valve Prolapse 120
Abel, H.; Zywietz, Chr.; Schiemann, W., and Alraun, W. (Wiesbaden): ECG Data Processing with the Hanover Program 127
Dolabjian, Z.L. and Krishjian, E.M. (Yerevan): On ECG Diagnosis without Information on the Absolute Amplitudes of Waves 136
Solakov, P. and Moumdjiev, N. (Plovdiv): Diagnostic Possibilities of the Uncorrected Orthogonal ECG Trethewie System in Ventricular Overload 137
Rugienius, I. and Korablikov, S. (Vilnius): Methods of Registration and Diagnostic Value of His Bundle Electrogram (HBE) 140
Szathmáry, V. (Bratislava): Distortion of the QRS Loop 142
Daskalov, I.; Tomov, I., and Tomov, L. (Sofia): ECG Baseline Stabilization for Screening Analysis 144
Matveev, M.; Tomov, L.; Tomov, I., and Daskalov, I. (Sofia): Lead Selection for ECG Screening 147
Tomov, L.; Tomov, I.; Matveev, M., and Daskalov, I. (Sofia): ECG Parameters for Screening Analysis 150
Urumov, G. (Sofia): Comparison between the Corrected (Frank) and Uncorrected (Akulinichev) VCG Systems by Means of Correlation Analysis 156
IV. Computer Applications in ECG and VCG

AntalÓczy, Z. (Budapest): Interrelationship of the Electrocardiological Parameters 162


Frey, T.; CsatÁr, M.; Schwarczmann, P.; Szabados, T., and Kenedi, P. (Budapest): A New Mathematical Approach to the Analysis of the VCG 167

Shakin, V.V.; Breuer, P.; Székely, E.; Kobzos, L.; Wolf, T., and Németh, J. (Budapest): Adaptive Compressing and Filtering for Vectorial Electrocardiograms 169

V. Clinical Application of Electrocardiology

Gassilin, V.S.; Bikov, I.I.; Romanov, A.I., and Grigoriev, N.N. (Moscow):
Possibilities of Vectorcardiography in Diagnosis of Latent Forms of Ischemic Heart Disease 205
Dolabjian, Z.L. (Yerevan): Pathological Electrophysiology of the Myocardium in Ischemia and Infarction 207
Georgiev, L. and Atanassov, A. (Sofia): Significance of Impaired Conduction between the Sinus Node and Right Atrium for Appearance of Absolute Arrhythmia in Mitral Stenosis 208
Král, V.; Drška, Z.; Novák, V., and Ježek, V. (Prague): Vectorcardiographic Load Test in Ischemic Heart Disease 211
Savova, A.; Ovanessjan, H., and Urumov, G. (Sofia): ECG Analysis at Rest and after Loading of Patients Suffering from Ischemic Heart Disease 215
Parsi, R.A. (Berlin): Assessment of the Severity of Chronic Ischemic Heart Disease and Acute Myocardial Infarction with the Help of ECG 220
Antonin, B. and Roje, J. (Rijeka): Separation of Strictly Posterior Infarction from Anteriorly Oriented QRS Loop as ‘Normal Variation’ 224
Linjova, V.A. and Ivanova, S.A. (Sofia): Electrocardiographic Data in Left Atrium Lesions, Characterizing the Acute and Chronic Phases of Ischemic Heart Disease 227

Contents IX

Dorossiev, D.; Perchev, I., and Hadjivalcheva, J. (Bankja): The Electrocardiographic Pattern of S-T Segment Elevation during Exercise Stress Testing after Myocardial Infarction 229
Atanasova, A. (Sofia): A Long-Term Observation of the Electrocardiographic Changes in Aged and Old People 231
Makolkin, V.I. (Moscow): Specific Features of the Heart Electric Field in Varying Hemodynamic Disturbances 234
Popiliev, I.; Malamov, E., and Petkov, A. (Sofia): VCG Investigations in Biventricular Hypertrophy 236
Dragoychev, C.; Pavlov, Z.; Prodanov, A.; Talakov, A., and Slavinska V. (Sofia): ECG and VCG in Right Ventricle Volume Overloading by Way of Experimentally Induced Insufficiency of the Pulmonary Valve 239
Pavlov, Z. (Sofia): The VCG in Mitral and Mitral-Aortal Valve Disease 243
Högye, M.; Móricz, J.; Kasza, F.; Móczó, I., and Csanády, M. (Szeged): Computerized Vectorcardiogram Data in Atrial Septum Primum Defect 249
Ivanova, S.A. (Sofia): Application of Minnesota ECG Classification Code System Amplified by Some Quantitative Code Signs, in Diagnostics of Acquired Vitium Cordis and Early Phase of Ischemic Heart Disease 257

Rostás, L. and Tarján, J. (Szegszárdd): Electrocardiographic and Vectorcardiographic Examination of Left Ventricular Hypertrophy in Chronic Uremia 259

Belov, J.; Urumov, G., and Torbova, S. (Sofia): Analysis of the Corrected and Uncorrected Leads in Patients with Arterial Hypertension 263

Shishmanov, D. and Grigorov, M. (Sofia): Right Bundle Branch Block and Tonometric Studies in Practically Healthy Youngsters 266

Grigorov, M. (Sofia): About the Significance of Right Bundle Branch Block in Chest Wall Deformity Patients 268

Kenedi, P. and Széplaki, S. (Budapest): Right Focal Blocks 270

Leitner, E.R. von and Meyer, V. (Berlin): His Electrocardiogram during Atrial Stimulation in 50 Patients with Transient Cerebral Symptoms 273

Grebenarov, V. (Plovdiv): Vectorcardiographic Changes in Wolf-Parkinson-White’s Syndrome by the Five-Dimensional System of Akulinichev 277

Palossy, B. and OÓ, M. (Budapest): ECG Alterations in Anorexia Nervosa 280

Slavinska, L.; Arnaudov, N.; Velichkova, D., and Athanassova, L. (Sofia): ECG Changes in Children with Noonan’s Syndrome 283

Zonev, K. and Valkov, I. (Plovdiv): ECG Changes Dependent on the Forms of Disturbed Acid Base Balance in Patients with Chronic Obstructive Diseases and Chronic Pulmonary Heart 286

List of Authors and Co-authors 289
Authors’ Index 294
Index vols. 1-18 296

Permanent Programme Committee of the International Congresses on Electrocardiology

H. Abel, FRG
P. d’Alche, France
R. Amirov, USSR
Z. Antaloczy, Hungary
B. Antonin, Yugoslavia
G. Arsenescu, Romania
R. van Dam, Netherlands
Z. Dolabjian, USSR
H. Kovarczyk, Poland
P. MacFarlane, Great Britain
F. de Padua, Portugal
Z. Pavlov, Bulgaria
H. Pipberger, USA
P. Rijlant (President), Belgium
I. Ruttkay-Nedecky, CSSR
T. Sano, Japan
O. Schmitt, USA
E. Schubert, GDR
B. Taccardi, Italy
R. Wenger, Austria