Book Reviews

Michael Oliver, Michael Ashley-Miller, David Wood (eds)
Screening for Risk of Coronary Heart Disease
This timely book fills a gap, summarizing present views on screening for coronary heart disease risk factors and practical approaches to detecting persons at high risk. The matter is very topical since a number of recent recommendations, particularly by the World Health Organization and a statement just published in the European Heart Journal, have emphasized that the ‘high-risk strategy’ and the ‘population strategy’ for the primary prevention of coronary heart disease are not alternatives but must supplement each other. Most of the chapters are written by clinical cardiologists, clinical research workers and epidemiologists. They are the outcome of a workshop held in Edinburgh in November 1985. The stage is well set by an introduction in which Oliver defines the issues, followed by Rose who compares the predictive power of the different risk factors. Next, the tests are discussed from the points of view of the methods used, inva-siveness and cost; the sections on lipids, thrombosis and hypertension are written by Lloyd, Meade and Dollery, respectively, A chapter on the need for screening presents the views of the cardiologist (de Bono), the epidemiologist (Shaper) and the general practitioner (Barber). Under the title ‘What is the value of screening?’, Tunstall-Pedoe weighs the yield versus the cost and Mitchell estimates the effect of screening on coronary heart disease incidence. The following chapter deals with ‘Practicability and efficiency’, with contributions by Friedewald on experiences in the USA, implementation of screening in the United Kingdom by Holland, a section by Williams on the question whether screening represents a wise use of resources. ‘Case finding’ within the context of general practice is the method favoured by Holland, also referred to as ‘Opportunistic screening’, meaning the detection of high-risk individuals in the course of a doctor’s visit primarily for another purpose, a former term being ‘incidental screening’. The medical reader will be intrigued by Williams’ section which introduces the notion of QALYs (quality-adjusted life year), a measure of health gain, applied in this case to the benefit which persons would derive from having been detected as being at high risk and being treated for it. Each chapter closes with a verbatim account of the discussions following the presentations but there is, at the end, a ‘General discussion’ in which Pyörälä compares the high-risk and population strategies in terms of actual experiences in Finland and Epstein discusses the prospects for more powerful screening tests. Apart from the presenters already named, there were several chairmen who took part in the discussions (Wald, Robertson, Ashley-Miller and Bouchier) and a number of invited participants who made contributions.
It is apparent from this account that there is a wealth of information in this relatively short, terse and eminently readable book. It appeals in particular to the practicing cardiologist and
practitioner to take an active part in screening for high-risk persons, to acquaint them with the current scientific views on screening and the practical issues involved. The book is highly recommended.

F.H. Epstein, Zürich

K. Wasserman, J.E. Hansen, D. Y. Sue, B.J. Whipp Principles of Exercise Testing and Interpretation

This is an excellent book on exercise testing and the interpretation of the results. Wasserman et al. have indeed enriched the vast literature available today on the topic of exercise testing. The book, however, differs from others on the same topic because it is a more comprehensive and profound analysis of the physiology of exercise – the measurement of the physiological and pathophysiological response to exercise and the principles of interpretation. Also discussed in this book are the protocols, the factors limiting exercise problems, the normal values plus 52 case reports which illustrate the interpretations of pathophysiological tests.

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The didactic and clinical relevance of what is being described in each chapter points to the enormous experience of the senior author and his coworkers. This book will enable everybody in exercise testing, whether in teaching, in clinical practice or in the laboratory to perform better work and to deepen their understanding as to the indications and contraindications of exercise testing procedures as well as of the clinical implications and interpretations of the exercise results. I highly recommend this book.

Jan J. Kellermann, Tel Hashomer

Amir Pelleg, Eric L. Michelson, Leonard S. Dreifus (eds)
Cardiac Electrophysiology and Pharmacology of Adenosine and ATP
Basic and Clinical Aspects
Progress in Clinical and Biological Research, vol. 230
Alan R. Liss, New York 1987
XVII + 395 pp.; E 42.00
ISBN 0-8451-5080-4

This collection of excellent papers resulted from the A.N. Richards Symposium held at Philadelphia in 1986 on the initiative of the active group of the Lankenau Medical Research Center. The program included the most important advances in the field of the cardiac electrophysiology and pharmacology of adenosine and ATP. Although the cardiac effects of adenosine and related compounds have been the subject of numerous reports since their first description by Drury and Szent Gyorgi in 1929, there has been no previous book solely devoted to this topic. The book comprises 21 chapters written by well-recognized authorities, most from North America. The five first chapters provide very valuable insights into the biochemical and physiological aspects of adenosine and ATP. Five other chapters deal with the cellular electrophysiology of adenosine and ATP at various levels of the cardiac conduction system.
(sinus and A-V nodes, Purkinje and ventricular cells), including one chapter describing the adenosine-vagus interaction at the cellular level. An important section of the book which includes seven chapters, is devoted to the basic and clinical aspects of the antiarrhythmic action of adenosine and ATP. These agents exert strong depressant effects on AV nodal conduction and effectively terminate 90-100% of paroxysmal AV reentrant tachycardias involving the A-V node. Such efficacy, similar to that of verapamil, associated with the ultrashort half-life of these agents has led to their use as the drug of first choice for terminating these arrhythmias both in adults and children. Although adenosine compounds have been found to be ineffective in most cases of ventricular tachycardia, Lerman and associates nicely described a unique type of ventricular tachycardia responsive to adenosine. The last four chapters examine the interaction of adenosine and ATP with the autonomic nervous system, describing their cardiac electrophysiologic actions and antiadrenergic and antihistaminic effects.

This book is unique insofar as it gathers our present knowledge on both the electrophysiologic and pharmacologic effects of adenosine compounds. This remarkable piece of work will be of great value for basic and clinical cardiac electrophysiologists as well as cardiovascular physiologists and pharmacologists. The editors of the book, especially Dr. Amir Pelleg, should be congratulated for providing us with this important contribution.

Bernard Belhassen, Tel Aviv


This book presents the proceedings of the 2nd Acta Medica Scandinavica International Symposium which was held in Gothenburg, Sweden in June 1985. It consists, in part, of a number of short contributions on various topics with special attention to exercise training in healthy and diseased patients.

I found it quite challenging to read this book because the main objective was not, as most often happens, the hemodynamic and physiological effect of physical activity, but the authors have concentrated more on metabolic and specific anatomophysiological topics, such as the role of muscles in protecting athletes from injury, the influence of muscle power on aerobic performance and the influence of physical activity on ligaments, tendons and joints. Furthermore, the effects of glucose tolerance, insulin resistance, thermogenesis, prostanoids and lipoproteins on exercise training are especially discussed, to mention just a few.

The quality of the papers in this multiauthored book is naturally somewhat uneven but it makes interesting and informative reading and I think that the editors, who have great experience in exercise physiology, especially in the healthy, have made the right decision to concentrate on topics which are generally neglected or normally only touched upon in an insignificant way. I liked P.O. Astrand’s summary, which reminded us that life began some 3.5 billion years ago and that all organisms have a genetic code based on the same principle. His philosophy on the evolution of the ever-changing environment may not find my full approval but I think that he has tried to introduce the main problem and that is a reply to the
question he poses, namely ‘Does physical training promote our health?’ – does it? I did not find a clear answer in this book but I would recommend it to everybody interested in the movement of the body, whether in patients or in the still healthy.

Jan J. Kellermann, Tel Hashomer

J.H.C. Reiber, P. J. V. Serruys

State of the Art in Quantitative Coronary Arteriography


The stated aim of this text is to show the clinical cardiologist, radiologist and physicist how quantitative coronary angiography may influence clinical decision making. This is a compendium of chapters written by well-recognized experts including the editors. The book chronicles technical and clinical progress in conventional coronary cineangiography, digital cardiovascular imaging and X-ray tomography. Basic principles, methodology, results of validation studies and clinical applications are discussed in sufficient detail to refer the interested reader to appropriate reference material. New radiographic techniques to measure coronary blood flow and to determine the ‘physiologic significance’ of coronary stenosis are reviewed in a similarly detailed way.

The book’s title ‘state of the art’ is a bit of a misnomer. Each author tends to highlight his own work rather than to give a critical review of the selected topic of each chapter. Taken as such, however, the book reflects the accomplishments in this highly technical field in 1985 and may therefore serve as a useful reference.

N. Eigler and P.K. Shah, Los Angeles, Calif.

Norman M. Kaplan

Clinical Hypertension, 5th ed.


Few medical fields have seen such an explosive development over the last decades as that of hypertensive cardiovascular disease and its treatment, resulting in an enormous outflow of literature.

Therefore, it must be considered as rather unique that since 1973 it has been possible for one man, Dr. Norman M. Kaplan, more or less on his own, to accomplish repeated up-dated editions of a book dealing with arterial hypertension. One has simply to agree with Dr. Kaplan himself when, in the preface to the fourth edition of this book, he humbly states that ‘the time and energy required to write a medical book almost single-handedly have made the endeavor increasingly rare and perhaps foolhardly’.

Disregarding this, in my opinion the result is outstanding in quality, covering all aspects of importance in the field up to early 1986. Thus, with the help of Dr. Ellin Lieberman, writing on Hypertension in Childhood and Adolescence, Dr. Kaplan has succeeded in presenting a complete, well-balanced and edited review of the numerous facets of arterial hypertension. Personally, I have only one minor objection: I would have liked to see the references to the chapter on ‘Treatment of Hypertension: Drug Therapy’, now covering altogether not less than nine pages, split up into sections dealing with each individual drug or drug class.

The volume can whole-heartedly be recommended to all those wishing to get an authoritative and comprehensive presentation of our current knowledge of clinical hypertension and its handling.
In the final part of the preface Dr. Kaplan states: ‘If I’m still around and capable, putting together the fifth edition should be just as exciting and demanding as working on the fourth’. Let us hope, that there will be more editions to come!
Rune Sannerstedt, Göteborg