

Book reviews

The importance of islets of Langerhans for modern endocrinology. K.F. Federlin and J.Scholtholt, 12th Workshop Conference, Hoechst. New York: Raven Press, 1984, 253 pp. hardback \$46.00. ISBN 0-89004-939-4

This book enshrines in print the deliberations of the 12th Hoechst Workshop Conference held in 1982, to mark the 60th birthday of Ernst Pfeiffer.

The book covers both the basic endocrinology of islets as well as several topics of clinical importance. The topics discussed have been chosen so as to emphasise those aspects of the area where developments are most rapid. Thus, for instance, L. Orci discusses the cellular relationships between component cells of the islets, G.M. Grodsky develops his ideas on how glucose regulates the preferential release of newly-synthesised insulin and M. Czech gives an account of insulin receptors and their relationship to receptors for related hormones.

The aetiology of diabetes is covered by W. Gepts and the possible role of viruses as a causative factor is discussed by Müntefering. In addition, there are articles on the use of infusion pumps, islet transplantation and on treatment with sulphonylureas, and with insulin. These emphasise what a long way there still is to go before diabetes of any kind is treated really adequately. Clinicians will continue to disagree.

It was a happy thought to have present Rachmiel Levine, who enlivened these proceedings with his characteristic wit and penetrating comments. Although the very obsessional may be put off by some occasional errors in the references, most readers of *Diabetologia* will enjoy this book. They will have wished they had been at the Schloss Reisenburg where the meetings took place. (K. Taylor, London)

N. Sakamoto and K. G. M. M. Alberti. Current and future therapies with insulin. Proceedings of the 1st International Symposium on Treatment of Diabetes Mellitus, Nagoya, 1982. Amsterdam Oxford Princeton: Excerpta Medica 1983. 409 pp, hardback, \$97.75; Dfl. 230.00. ISBN 0 444 90302

This volume in an International Congress Series contains the proceedings of a symposium on the treatment of diabetes held in Japan in 1982. The format is fairly typical of this type of book with a few review lectures including four on human insulin (100 pages) and a mass of free communications (300 pages).

The review lectures come from a home team from Japan and some old friends of Western diabetes whose attendance presumably allows justification for calling the meeting International. The reviews are disappointing which does not necessarily reflect on the lecturers. Lacking the urgency and brilliancy of verbal presentation, much of the impact is lost on the printed page, while without comprehensive referencing their value is diminished as review articles. Editors of volumes such as this must begin to accept that a review article is more than a lecture with a few references added. The lecturers, now authors, tend to concentrate on their own contribution to a particular topic repeating previously published work (8 of 10 figures in one review contain an acknowledgement to previous publication) and admitting this with honesty and apology.

The converse is so in the free communications of which there are more than 50. In truth they are short or preliminary communications where publication in a book has circumvented the exhaustive refereeing process of a reputable journal. The contributions report detailed research (90% of it in Japan) on topics, such as insulin action, receptors and pancreas and islet transplants. Thus, whichever field of diabetes the reader is in it is possible to find something of interest but

perhaps only one-fifth of the book will be in that field. At current prices this results in an expensive way of ensuring that nothing is missed.
Dr. M. Natrass (Birmingham)

Diabetes and heart disease (Metabolic aspects of cardiovascular disease 2). R.J. Jarrett (ed). Amsterdam, New York, Oxford: Elsevier 1984. 170 pp, hardback, £32.00; US\$52.00; Dfl 135.00. ISBN 0-444-80536-2

Every student who makes lists has no hesitation in including diabetes mellitus as a contributory factor for 'atherosclerosis', by which he means coronary heart disease, stroke and limb gangrene. The territories in which our knowledge of the harmful effects of diabetes are however most secure lie within the smaller vessels of the eye and the kidney, rather than in the macrocirculation and, as Oakley pointed out in 1960, "The relationship between arterial disease and diabetes is more easily assumed than proved". Dr. Jarrett has therefore performed a valuable service by bringing together nine contributors who describe the links between diabetes and the heart, as well as the mechanisms by which these links might be mediated.

Chapter 1, by the Editor, examines the epidemiological evidence for a link between impaired glucose tolerance, diabetes mellitus and coronary heart disease, bearing in mind the imperfections of the UK death certification system and the consequential problems of trying to compare now and then within one country or one country with another. It stresses that until the linking mechanisms are worked out, it is vital to ensure that other risk factors, such as smoking and hypertension, are actively controlled. In chapter 2, a Danish group emphasise that we should not equate 'diabetic cardiopathy' with 'coronary heart disease' because many of the most characteristic diabetic lesions relate to the heart muscle cells and to the smaller intra-myocardial vessels. A team from Sheffield, UK, outline the disturbances in coagulation, fibrinolysis and platelet behaviour which have been recorded in diabetes, and as one would expect with such a difficult and often conflicting body of evidence, offer a 'not proven' verdict. Chapters follow from London and Edinburgh on cardiac and autonomic function in diabetes, while the final chapter, from a Finnish group who have contributed so much to the state of the art in coronary disease, reviews the evidence on lipid abnormalities in diabetes. This rounds off the book well in that our imaginary student's list of causes and effects would probably have incriminated lipid abnormalities as the causal link between diabetes and coronary heart disease, whereas Dr. Nikkilä emphasises that many diabetic patients show normal lipoprotein patterns, even when badly controlled. Moreover, (Type 2 non-insulin-dependent) diabetic subjects have more disturbed lipids than Type 1 (insulin-dependent) diabetic patients whereas Dr. Jarrett's earlier epidemiological chapter makes it clear that the link between Type 1 diabetes and 'atherosclerosis' is easier to substantiate than a link with Type 2 diabetes.

This slim volume is therefore indispensable for everyone who is wrestling with this problem and its clear style and comprehensive reference lists will serve as an invaluable introduction to the newcomer to the difficult question of whether diabetes 'causes' vascular disease and if so, how?
J. R. A. Mitchell (Nottingham)

Lessons from animal diabetes. E. Shafrir and A. E. Renold (eds). London: John Libbey 1984. 832 pp, hardback, £65.00; US\$95.00. ISBN 0-86196-032-7

Based on the lectures and discussions delivered during the International Workshop on Animal Diabetes in Jerusalem in November

1982, Eleazar Shafir and Albert E. Renold have put together a most formidable volume of *Lessons from animal diabetes*. Content, format and, in particular, the extremely broad and thorough approach based upon the ambition to cover every detail of animal diabetes are bound to make this book a classic for the years and decades to come. In more than 800 pages, divided into 10 chapters, ranging from "insulin secretion failures" to "fertility and pregnancy in diabetic animals", the current status of knowledge on animal experimentation in diabetes is unfolded. It would be meaningless to try to highlight any points of particular interest in the context of such a book review. It should be noted, however, that in contrast to similar monographs and proceedings in the past, the Lessons do not focus exclusively on spontaneous diabetic syndromes in rodents, but (re-) direct the readers' attention, in addition, to the interesting aspects of diabetes following pancreatectomy, avian diabetes, and similar metabolic syndromes in sheep and pigs, etc. – A remarkable feature of the book is the wealth of original information. Obviously, the editors have been successful in persuading the authors to include previously unpublished data. Since every author knows that international journals, such as *Diabetologia*, will not publish such observations as original papers again, it must have meant a sacrifice for some of the contributors. From my point of view, these authors made the right choice: there will hardly be a better and more prestigious forum to publish diabetes-related animal research than the Shafir-and-Renold Lessons. Finally, I must congratulate and thank the editors for having undertaken the difficult task (and in most other instances fruitless) of including the discussions in their volume. I think these sections, concluding every chapter, are of particular value and most helpful for understanding areas of controversy and/or fields of current interest and rapid development. Just to name one example, of many others, I would like to stress the high scientific standards and informative discussions on ocular complications, moderated by Dr. R. Clements, jr. At the end of another most fascinating discussion section (on insulin secretion failures), the moderating chairman, Dr. A. E. Renold, described in his epilogue the entire philosophy on which the Lessons are based, from which I would like to cite the following verbatim: "By providing us with a collection of possible mechanisms, it is hoped that the world-wide work with animal diabetes will improve our ability to ask questions pertinent to human individuals predisposed to diabetes or already suffering from one of the forms of the disease". This book will become a classic for experimental diabetology. It should be a most useful asset on the shelves of anyone interested and/or working in diabetes research (not just

experimental diabetology). To help to get it there, it might be useful to involve the Easter-Bunny* in the purchasing manoeuvre, since the price of the volume approaches its exceptional scientific value.

The diabetes community should be grateful to the editors of the *Lessons* for the tremendous effort they have made; at the same time they should be given every possible encouragement for the edition of a *Lessons II* in a few years. Michael Berger (Düsseldorf)

* (whoever that may be under the local circumstances)

Diabetes mellitus: etiopathogenesis and metabolic aspects. F. Belfiore, D. J. Galton and G. M. Reaven (eds). Basel, Munich, Paris, London, New York: S. Karger 1984. 383 pp 70 figures, 32 tables, hardback, SFr 212.00; DM 254.–; US\$ 127.00. ISBN 3-8055-3771-9

This is an elegantly produced book. It is the fourth in a series entitled "Frontiers in Diabetes" consisting of the edited versions of presumably all the lectures and papers presented at an International Conference in Catania (Italy) in November 1982.

It is difficult to be sure to which readers the book is aimed apart from the participants in the Conference. The first group of articles are reviews and are similar to reviews which appear in journals and, as is often the nature of such articles, little new is included, i. e. that has not been published elsewhere. However, these reviews are in the main informative and well presented and will prove interesting for research workers and clinicians involved in other aspects of diabetic research. Occasionally a degree of dogma creeps in and some reviews are based on the results of experimental work in animals rather than in human subjects. The article by Drs. Zaidise and Bessman on their hypothesis that diabetes is an expression of uncontrolled stress is thought provoking but, to this reviewer, unconvincing.

The shorter papers under the general title "Current Topics in Diabetes Research" suffer from a loss of impact, being published 2 years after presentation. Most of the authors work in Italy, or in the laboratories of the Editors, and these papers contain interesting observations and in 1982 would have been exciting presentations. However some of the papers are barely encompassed by the title of the book, e.g. those on the effects of the treatment of diabetes. This reviewer found the neologisms of the text disconcerting, e.g. "hepa-beta-loop" and "etiopathogenesis". J. K. Wales (Leeds)