

LIPIDS IN HEALTH AND DISEASE

The Chemistry of Lipids in Health and Disease. By H. K. King, M.A., Ph.D., F.R.I.C. Pp. vii + 104. Springfield, Ill.: Charles C. Thomas. Obtainable from Blackwell Scientific Publications. 1960.

The subject matter of this book is based on a course of lectures given by the author at the University of Liverpool. In a series of seven chapters the author gives a survey of recent advances concerning the relationship of lipids with water, the chemical structure of lipids, the digestion and absorption of fats, the oxidation of fatty acids, the biosynthesis of lipids, the essential fatty acids and fat-soluble vitamins.

A final chapter on 'Lipids and atherosclerosis' gives a well-balanced and well-reasoned account of one of the most urgent medical problems of today. The author's aim is to 'acquaint the reader with the factual and theoretical background needed to enable him to define the problem, to understand the various protagonists and to bring his own informed judgment to bear on the opinions put forward'. He discusses among other points the Cape Town work on Europeans, Coloured and Bantu people and Sinclair's theory of relative deficiency of essential fatty acids. Discussing the claim that the clotting time is reduced after a heavy fat meal, he mentions that in some experiments viper's venom was used in determining the clotting time and comments: 'One authority has suggested that the only practical conclusion that can be safely drawn is that one should be particularly careful to avoid snakes after a heavy fat meal'.

He sums up finally as follows: 'It cannot be too strongly emphasized that all responsible participants in the atherosclerosis controversies agree that none of the evidence yet available would justify advising the public to make radical changes in its dietary habits.' This was written before the recent pronouncement by the American Heart Association.

The subject matter of this book is clearly presented and a valuable list of references is given at the end of each chapter. The book is easy to read and can be strongly recommended to students and medical practitioners alike.

H.Z.

THE ACTIVITY OF DISEASE

Assessment of the Activity of Disease. By J. S. Lawrence, M.D., M.R.C.P. Pp. viii + 252. Illustrated. R4.20. London: Pitman Medical Publishing Co. 1961.

Die beoordeling van aktiwiteit ten opsigte van siektes is van die grootste belang ten einde behandeling voort te sit en om prognose te bepaal.

In hierdie uiteensetting vind ons 'n beskrywing van die meer gewone metodes wat gebruik word om aktiwiteit te bepaal.

Daar word kortliks verwys na die kliniese aanduidings van 'n aktiewe proses soos die algemene simptome, teenwoordigheid van anoreksie, gewigsverlies, pyn, en temperatuur. Daar word ook gewys op die waarde van die witbloedsel-beeld.

Die werk handel egter grootliks oor die gebruik van drie laboratorium-metodes en ook hulle tegnieke en interpretasie, nl. die ondersoek van die plasma proteïene, die bepaling van die rooibloedsel-besinkingsnelheid, en die waarneming van die bloed-viskositeit.

Hierdie ondersoek is afhanklik die een van die ander en berus daarop dat daar faktore vrygelaat word deur beskadigde weefsel wat inwerk op die proteïene-spektrum, en as gevolg van die biofisiese omstandighede wat hiermee saamgaan, vind ons dan veranderinge in die besinkingsnelheid van die rooibloedsel asook in die viskositeit van die plasma. Op die besinkingsnelheid word veral baie klem gelê en met reg omdat dit so 'n eenvoudige en bruikbare ondersoekmetode is. Die versnelling van die rooibloedsel-besinking vind plaas as gevolg van verhoogde rouleaux-vorming, grootliks as gevolg van verhoging van die fibrinogeen en alfa₂-globulien-fraksies van die plasma.

Die ondersoek is egter beïnvloed deur veelvuldige faktore, en dit is uiters belangrik dat almal wat van die bloed-besinkingsnelheid gebruik maak, goed op hoogte moet wees met nie alleen die fynste besonderhede van die tegniek nie, maar ook met die juiste interpretasie van die resultaat. Dit moet bv. onthou word dat die lengte van die buis, die feit of dit presies vertikaal gehou word, of die onttrekking van bloed van die pasiënt plaasvind sonder veel trouma en plaasvind met 'n droë spuit, en selfs die wyse waarop die bloed toegevoeg word tot die buis (d.w.s. of dit opgesuijg word of deur 'n spuit ingelaat word), die bepaling kan beïnvloed en verkeerde resultate kan gee. Dit word weer hier bevestig dat die Westergren-metode en die gebruik van 3-8% sitraat as antistolmiddel die betroubaarste waardes gee. Ongelukkig word daar geen melding gemaak van die gemodifiseerde Westergren-metode met die gebruik van Sequestrine-bloed soos tans in Edinburgh en elders gebruik word nie.

Die skrywer wy verder uit oor veranderinge in hierdie verskynsels en daar is wye bespreking oor verskillende siekte-

toestande; infeksies, allergies, toksiese en metaboliese toestande, en siektes van die verskillende stelsels.

Die boek is baie nuttig. Op hierdie gebied, soos in alle ander gebiede in die geneeskunde, is daar egter baie snelle vooruitgang en dit kan nie verwag word dat enige enkele persoon volledig en met gesag oor die hele gebied sou kon skryf nie. Derhalwe is dit seker nie onverwags dat die skrywer nie oor die gebruik van ensiembepalings en die reaksies wat afhanklik is van die ontwikkeling van teenliggaampies iets te sê het nie.

A.J.B.

CARCINOMA OF THE COLON

Carcinoma of the Colon. By Edward G. Muir, M.S., F.R.C.S. Pp. vii + 181. Illustrated. R4.20. London: Edward Arnold Publishers, 1961.

This monograph makes available to all the knowledge and experience of its distinguished author, and is a perfect example of the type of literature that is of real value to all surgeons. First there is a detailed description of the symptoms, based on an analysis of over 700 cases, and an interesting discussion on the pathology and diagnosis. In the chapter on obstruction, however, the question of electrolytes is not dealt with in sufficient detail.

There are 4 chapters describing the operations for carcinoma in various parts of the colon, with the most excellent diagrams and discussion on the amount of mesentery to be removed. These merit most careful and repeated study by every general surgeon. Finally, various types of staged procedures, and mortality and survival figures are reviewed.

A.B.

KNEE-JOINT DERANGEMENT

Clinical Orthopaedics. No. 18. Internal Derangement of the Knee Joint. Editor-in-Chief Anthony F. De Palma, with the Assistance of the Associate Editors, The Board of Advisory Editors and the Board of Corresponding Editors. Pp. ix + 293. Illustrated. R6.00 net. London: Pitman Medical Publishing Co. 1961.

This is one of the series of volumes in symposium form produced under the auspices of the American Association of Bone and Joint Surgeons. Although this volume is designated 'Internal Derangement of the Knee Joint', only 153 pages of the 288 pages are devoted to the knee joint. The remainder are grouped into 'General Orthopaedics' and a section titled 'Items'.

It would be invidious to select individual essays for appraisal in such a brief review. However, the paper which conforms most closely to the title 'Internal Derangement of the Knee Joint' is that by G. Murdoch, called 'Meniscus Removed in Error'. Murdoch presents an analysis of the 156 cases of mistaken diagnosis in a series of 4,161 meniscectomies. It is interesting that in the female the most frequent source of error is recurrent subluxation of the patella.

To ensure balance in a 'symposium' type of book, careful editing is required. Although there are several praiseworthy contributions in this volume one feels that additional pruning would have produced a more readable volume which adhered more closely to the title.

M.S.

OCCUPATIONAL HEALTH

The Health of People Who Work. Edited by Albert Q. Maisel. Pp. xiii + 268. R4.00 net. Oxford: Pergamon Press Ltd. 1960.

This book is based on the reports made to the 1959 National Health Forum in the United States by over 200 persons who are experts in various fields of occupational health.

Although much ground is covered, no claim is made that it provides all the answers, and it is recognized that there may be inconsistencies in the different opinions expressed by persons taking part in the forum discussions.

This book has been ably edited to provide practical information for those engaged in occupational health matters, and with the growth of industrial health problems it will be found to be very acceptable.

A.H.T.

MANAGEMENT OF ACUTE POISONING

The Medical Management of Acute Poisoning. By Gordon Cumming, B.Sc., Ph.D., M.B., Ch.B., A.R.I.C., with a chapter on the Psychiatric Aspects of Poisoning by Myre Sim, M.D. (Ed.). D.P.M. Pp. ix + 128. R1.05 net. London: Cassell and Company Ltd. 1961.

This book lays special emphasis on the physiological principles on which the treatment of acute poisoning is based. Consideration is also given to the psychological aspects which have led the victim to use poison. Carbon monoxide, barbiturates, salicylates, and alcohol are considered in detail, and a few other poisons receive some mention. The words 'insecticide', 'organic phosphate ester', and 'parathion' are not in the index, although this anticholinesterase is considered in the text; there is no mention of pyridine aldoxime methiodide in the treatment of this poison. On page 109 subheadings are needed.

This is a useful little book for those concerned with the problem of poisoning.

N.S.

STRANGULATION OBSTRUCTION

Strangulation Obstruction. By Isidore Cohn, jr., M.D., D.Sc., (Med.). Pp. xxii + 273. illustrated. R9.40. Oxford: Blackwell Scientific Publications. 1961.

This monograph is a presentation of the author's extensive personal experimental studies of the rôle of the bacterial factor in strangulation obstruction. Evidence is produced that the production of lethal toxins by *Cl. welchii* in the presence of dead or dying tissue is the cause of death in otherwise adequately treated strangulation obstruction, and that suppression of the intraluminal bacterial flora during a critical period can permit revascularization and survival of bowel. There is a comprehensive and critical review of the literature.

The book should be of interest to all practising surgeons, and of particular value to the postgraduate student and the research worker in this field.

J.A.M.

BLOOD FUNCTIONS

Functions of the Blood. Ed. by R. G. MacFarlane, M.A., M.D., M.R.C.S., F.R.S. and A. H. T. Robb-Smith, M.A., M.D., F.R.C.P., M.R.C.S. Pp. xiii + 635. Illustrated. R12.00. Oxford: Blackwell Scientific Publications. 1961.

This book presents an unusual approach to the study of blood. In most chapters an evolutionary approach to the function of blood is developed, for example, the evolution of oxygen transport, the evolution of the shape of the red cell and leucocytes and blood groups in man and animals.

Sixteen specialists give factual information of unusual interest on blood functions and reactions based on original research, such as the affinity of myoglobin and haemoglobin for oxygen in diving animals. It presents a lucid explanation of phenomena like the Haldane-effect and its counterpart, the Bohr-effect, and their biological significance in gas transport.

Research workers and advanced students in many disciplines will be interested in this work. For example, chapters on the racial distribution of blood groups have their application to anthropological research, whereas the pathologist will be enlightened by the nature of the relation between blood groups and disease. With our modern concept of fatty acids as readily utilizable sources of energy, the chapter on the transport of fatty acids is of wide interest.

An excellent description is given in chapter 7 of the reaction of blood to injury. This includes a clear account of the complex mechanism of blood clotting. The text is well illustrated; the colour plate of haemoglobin in the nerve cord of the sea mouse and the electron micrograph showing platelets undergoing viscous metamorphosis, are only two examples of the high standard of reproduction.

A.v.Z.