Book Reviews

ADVANCES IN CHEMOTHERAPY

Drugs, Parasites, and Hosts. A Symposium on Relation between Chemotherapeutic Drugs, Infecting Organisms, and Hosts. Edited by L. G. Goodwin, and R. H. Nimmo-Smith. (Pp. 367+viii; illustrated. 55s.) London: J. and A. Churchill Ltd. 1962.

This volume publishes with commendable rapidity the proceedings of a symposium held in London in March, 1962, attended by many distinguished participants from abroad. The relationship between drug, parasite, and host, depicted as triangular on the dust cover and intended to be the theme of the meeting, was ignored by many of the contributors, except in so far as it is involved in selective toxicity for the parasite, which after all is the *sine qua non* of chemotherapy.

This relationship was the main theme of only one paper, that by E. F. Whiteside on trypsanosomiasis in cattle; several others discuss the effect of chemotherapy on the immune response, and one, by H. Williams Smith, is devoted to a side-effect on the host, that produced by antibiotics on the intestinal flora. Host participation is also concerned in D. A. Mitchison's description of the metabolism of isoniazid. Otherwise the subject of the meeting seems simply to have been advances in chemotherapy, with particular reference to mode of action. E. F. Gale, in summing up, devotes most attention to mechanisms of selective toxicity. The meeting dealt successively with helminthic, protozoal, bacterial, and virus infections, and in so vast a field the choice of individual subjects inevitably seems capricious, since it could not be comprehensive. A paper on the generality of bacterial infections, distinguishing between those in which host reactions contribute to recovery and others (notably endocarditis) in which drug therapy must succeed alone, would have been appropriate to the theme.

The discussions are fully reported and convey an impression of spontaneity; and editing and illustration are good, except that Plate III seems to be unconnected with anything in the neighbouring text. Publication of symposia in book form has been criticized on grounds of delay and duplication: here there has been little delay, and, though there is duplication, these fresh accounts of such a wide variety of vital therapeutic achievements have much to offer to any reader.

L. P. GARROD.

AMERICAN SURGICAL YEAR BOOK

The Year Book of General Surgery. Edited by Michael E. DeBakey, B.S., M.D., M.S. (Pp. 634; illustrated. 60s.) London: Lloyd-Luke Ltd. 1963.

Every year since their foundation in 1900 the *Practical Medicine Year Books,* published in Chicago and now comprising sixteen volumes, have appeared and have maintained a high standard in extracting what is relevant from an increasingly voluminous literature. The volume on *General Surgery,* which was for long edited by Evarts Graham, has now passed under the equally distinguished control of Michael DeBakey, and therefore if we say that the anticipated interest, choice of material, and quality of extraction have been sustained that is high enough praise.

It happens that the last time the writer reviewed one of these volumes for the *B.M.J.* was in 1947 and that provoked a reminiscent mood. Then a large part of the world was recovering from the war, and surgery as a whole was turning from its wartime preoccupations to the prospect of a largely expanded field of possibilities. In the introduction to that volume Graham drew attention to the fact that in countries that had not been devastated by the war, such as Sweden, this new outlook had already started—Crafoord, for instance, had for the first time successfully operated upon a case of coarctation of the aorta.

It is therefore of some interest to compare the present year's issue with that of 1947. The page size has been somewhat increased but the number of pages is correspondingly reduced, so that the total content remains the same. The number of pages devoted to various branches of surgery shows the changing trends of interest and development, as the following random selection indicates:

	1947	*1963*
Tumours	8	25
Breast	20	9
Heart	10	72
Oesophagus	8	17
Lungs and pleura	45	32
Sympathectomy	9	0
Appendix	6	1

These changes of emphasis are of course not limited to the U.S.A. but are paralleled in all the more advanced countries; indeed, the information now more freely obtainable from beyond the Iron Curtain shows that the same applies to the communist countries. As an example of this the several articles dealing with coronary occlusion and its surgical treatment extracted in this volume may be compared with the accounts of experimental operation upon dogs—such as internal mammary to coronary anastomosis—carried out in the U.S.S.R. and described very fully in a recently published translation.[1]

An innovation in the *Year Book* last year was the inclusion of a section entitled "Selected References In Surgery"; this year it runs to no fewer than 35 pages and should prove to be of real value to readers. As usual there are a large number of well-reproduced illustrations from the original articles, somewhat reduced in size but always quite clear. Naturally the vast majority of the extracts are of papers of American origin, but they provide an excellent summary of the present stage of surgical practice and thought.

Many years ago we expressed a very favourable opinion of these surgical extracts and there is certainly no reason to change that view of the present volume.

NORMAN C. LAKE.

REFERENCE

[1] *Experimental Transplantation of Vital Organs,* by V. P. Demikov, 1962. Consultants Bureau, New York.

CHEMICAL CARCINOGENESIS

Chemical Carcinogenesis. By David B. Clayson, M.A., Ph.D. (Pp. 467+viii; illustrated. 72s.) London: J. and A. Churchill Ltd. 1962.

Nobody can deny that too many books—i.e., monographs, reviews, progress reports, etc.—are published these days, particularly in the field of medical and biological sciences. It is as if the fact alone that a subject is complex, full of contradicting hypotheses, and in many respects deficient of clear-cut results and interpretations is a challenge to numerous authors and publishers to write and issue "another one." Of course there are monographs and reviews which appear at the right moment either to precipitate a final solution of a set of problems or to summarize achievements of the

immediate past. Does the book under review belong to these "justifiable" categories? In part it does, in part it does not. Where the author, who himself has contributed valuable experimental work to the subject, has written with a basic amount of humility, non-partisanship, and enthusiasm these paragraphs and chapters represent a most valuable record, but where he did not suppress a certain intellectual pride, a tendency to arbitrate in polemics between different schools, a perhaps understandable leaning towards quoting other reviewers instead of offering a summary of original work, the book is letting the reader down. Thus the chapter on environmental cancer in man is very valuable, though a remark such as that appearing on p. 18—"oils, tars and pitches are extremely complex mixtures which probably contain a vast number of molecules of biological interest"—and the quoting of only one paper by Wynder *et al.* appear to be somewhat out of balance.

The two chapters on testing chemicals summarize soundly methods and interpretation, the latter particularly desirable for overcoming the experimental pathologist's traditional antipathy vis-à-vis a strictly quantitative treatment of biological experiments. In subsequent chapters adequate treatment is given to the carcinogenic effects of various materials and compounds from plastic films and macromolecules, via a great number of organic and inorganic agents, to hormones. However, no reference is made to more recent reports of tumorigenic activity of nucleic acids; inorganic chemicals are given rather too short a consideration (cadmium is missing altogether); and the question could be posed: Why are the ring systems from p. 138 onwards drawn in an El Greco style? When the monograph begins to discuss compounds which show also distinct chemotherapeutic and not only carcinogenic activities, reports of "potent inhibitors of transplanted tumours" are sometimes uncritically quoted. References to the mechanisms of action and metabolism of alkylating agents, etc., are welcome, but the text contains several inaccuracies. For instance, on p. 188, Chart 8.1 "after Ross and Warwick, 1960a,b" should read "after Roberts and Warwick, 1961a,b." The expression "slight encouragement" (p. 194) in connexion with tumour-inhibitory effects of malignancies in man sounds patronizing (and does not tally with a number of reliable reports in the literature), and on p. 199 the references to the work of Lawley and Brookes are to progress or summarizing reports rather than to the original detailed contributions of these authors. The chapter concerned with the author's special field of study, the aromatic amines, is excellent, and so is the discussion on azo-compounds. But among the hepatotoxins the author seemingly missed the interesting contribution to the "nitrosamine" story by Druckrey and collaborators in Germany.

The remainder of the book is taken up by a useful discussion on initiators and promoters, by the rather difficult problem of hormonal action (a matter deserving a whole volume to itself), a survey of the binding which takes place between certain carcinogenic agents and cell proteins, and a not very helpful chapter on the relationship between carcinogenicity and anti-cancer (chemotherapeutic) effects with particular reference to alkylating agents. In the latter connexion it might have been better if the author had kept within the terms of reference of his title, for his touching so briefly on the subject of cancer chemotherapy and his suggestion on the basis of a single reference (i.e., p. 404, Karnofsky and Sykes, 1959) that this approach has been unrewarding in the clinic savours of gratuitous comment. On the same page the reduction of mustard azo-compounds is ascribed to Timmis (1959), while this work has been published by Ross and Warwick (1956).[1]

The book, which is well produced and carries a fluent style, finishes up with some theoretical considerations of the processes of carcinogenesis, the somatic mutation theory being contrasted with the immunological one. Perhaps in both cases "hypotheses" might be a more contemporary expression. But this is where we came in.

F. BERGEL.

REFERENCE

[1] Ross, W. C. J., and Warwick, G. P., *J. chem. Soc.*, 1956, pp. 1364, 1719, 1724.

ILLUSTRATED PROSTATIC SURGERY

An Atlas of Prostatic Surgery. By Perry B. Hudson, M.D., and Arthur Purdy Stout, M.D. Foreword by W. W. Scott, M.D. (Pp. 170+xiii; illustrated. 94s. 6d.). Philadelphia and London: W. B. Saunders Company. 1962.

This book provides an illustrated guide to open prostatic surgery and will be welcomed by all those who practise urology and wish to review their technique. Apart from the high quality of its presentation it has two particular merits. In the first place it emphasizes that prostatectomy is no longer an unrefined operation within the scope of the occasional surgeon without special urological experience. Secondly, it provides a balanced description of operative technique by the suprapubic, retropubic, and perineal routes that may prove stimulating to those who habitually confine themselves to one type of operation. The authors rightly point out that acquaintance with a variety of techniques is nowadays required to deal with the full range of prostatic disease.

The illustrations are well drawn and can be followed without difficulty by anyone familiar with pelvic surgery, while many of the details and recommendations with regard to post-operative management will be found helpful. The book can be particularly recommended to those surgeons who, in the past, acquired their technique in general surgical units and who wish to bring themselves up to date. Likewise it will appeal to all postgraduate trainees in the specialty who are anxious to learn and apply the refinements of modern prostatic surgery.

J. D. FERGUSSON.

ARTIFICIAL RESPIRATION

Artificial Respiration. Theory and Applications. Edited by James L. Whittenberger, M.D. (Pp. 276+x; illustrated. 80s.) London and New York: Harper and Row. 1962.

"The aim of this book is to present current concepts of the common methods of artificial respiration along with practical and physiologic considerations on which their use is based" (foreword). The list of authors is impressive but the book is disappointing. Maybe the speed with which a topical volume must be produced accounts for the lack of precision in writing. There is much repetition, and both the text and reference lists of the various sections are very uneven in emphasis. It is not easy to decide for whom the book is intended.

The first section, "Physiology of Respiration," is not a comprehensive summary. On the basic issue of the assessment of lung ventilation a nomogram is advocated, but an immediately sequent paragraph rightly warns us that it will not apply to most patients who need artificial