

BOOK REVIEWS : BOEKRESENSIES

A CYTOLOGIST ON CANCER

Cancer Cells. By E. V. Cowdry. Pp. 677 + xvi, with 137 illustrations. £6 16s. 0d. Philadelphia and London: W. B. Saunders Company. 1955.

Contents: 1. Cancers Defined. 2. Malignant Growth of Cancer Cells. 3. Cytoplasm of Normal and Malignant Cells Compared. 4. Nuclei and Division of Normal and Malignant Cells Compared. 5. Chemical Properties of Cancerous Tissues. 6. Occurrence of Cancers in Animals and Plants. 7. Agents Causing Cells to Become Malignant. 8. Single Trauma Cancers. 9. Viruses as Cancer Agents. 10. Mutations as Cancer Producers. 11. Cellular Susceptibility to Cancer. 12. Heredity and Susceptibility to Cancer. 13. Age and Sex Susceptibility of Cells to Cancer. 14. Latency in Cancer Development. 15. Modifying Factors in Cancer Development. 16. Geographic Frequency of Different Types of Cancer. 17. Cancer Prevention. 18. Cancer Diagnosis and Treatment. 19. Unexplained Disappearance and Changes in Malignancy of Cancer Cells. 20. Cancer Research. Appendix. Bibliography. Index.

Cowdry has a striking record in medical bibliography as an editor of comprehensive works, and those who know and value General Cytology, Special Cytology, or Problems of Ageing, will be interested to note that he has attempted this vast field on his own. The list of chapters will indicate how widely he has interpreted his title—he ranges from pure cytology to cancer treatment, demography and the administration of cancer research funds.

This subject, so often dealt with by pathologists and surgeons, has long needed reviewing by a cytologist, and the work can be read with much profit by both expert and beginner, who will find it well within his comprehension. The roots of many terms are given in the text—perhaps too didactically, for it is distracting to encounter a digression explaining the well-known connection between the term 'muscle' and 'mouse', or to find 'spontaneous' explained in two places in the text. Such defects have made the writing a trifle ingenuous in parts.

It is nevertheless refreshing nowadays, when the prevalent tendency is to employ so many authors that a theme is buried in detail and conflicting views, to find such a vast work attempted

by a single author; yet one must regretfully conclude, as Cowdry admits, that the subject after all, was too big for one man. It might have been possible to divide this book among 3 or 4 with advantage, but when one attempts a labour of this size, and manages to be up-to-date in the references, it is impossible to provide those benefits which would justify single authorship, viz. the considered opinion of an expert in the field, rather than the mechanical review of recent articles. In parts, it is regretted, this book tends towards the latter. Fibiger's claim to have induced stomach cancer by nematode infestation for example is mentioned, also that others have doubted this, but the author does not take sides. In other sections gaps occur; e.g. there is no mention of J. R. Baker's work on the lipocondria in the discussion of the Golgi apparatus. Some errors are hard to explain; thus head abnormalities in the sperm are quoted as an indication of impotency instead of sterility. The statement had no bearing on the subject under consideration, and the error simply annoys the medical reader.

There is a hint of the dictaphone in this work—errors, clichés, and misprints are unusually numerous and it lacks those scholarly standards that unfortunately also unduly defer the publication date.

Despite this criticism, which is one of detail and hastiness of style, one must emphasize that the extent both of the author's knowledge and its range is immense. About 2,400 references are quoted, not all dealing with cancer, but much is included that one would otherwise have great difficulty in finding. His description of modern cytology in the light of electron microscopical studies is particularly good. There are numerous illustrations, mostly from published work by courtesy of the authors. It is probably the very quality of this work and the experience of its author that makes what after all are minor defects the more detectable. As a general detailed introduction to many aspects of this subject, it is unrivalled, and a tribute to the immense experience of the author. It is a work of reference to which I shall turn again and again.

On the subject of the support of cancer research Cowdry's views deserve serious consideration, more especially his conclusion that the present trend towards annual grants, after long and detailed reports, is an unfortunate development, and permanent endowment would be far more efficient.

The difficult question remains, what should have been left out? Even the chapter on treatment, obviously out of place and too briefly dealt with to be of much use, has sections one would be sorry to miss. Still the cost of this book is too high and much could have been excluded without serious loss, including some of the illustrations, by more careful editorial pruning. Who, one wonders, would edit Cowdry?

A.G.O.

TROPICAL INFANT NUTRITION

Infant Nutrition in the Subtropics and Tropics. By D. B. Jelliffe, M.D., M.R.C.P., D.C.H., D.T.M. & H. Pp. 237, with illustrations. £1 5s. 0d. Geneva: World Health Organization. 1955.

Contents: 1. Evolution of Infant Feeding in the Western World. 2. Present Infant-Feeding Practices in the Subtropics and Tropics. 3. Present Status of Nutritional Disease Among Infants in the Subtropics and Tropics. 4. Methods of Improving Infant Feeding in the Subtropics and Tropics. 5. Prevention of Kwashiorkor. 6. Nutrition Education in the Maternal and Child Health (MCH) Centre. Acknowledgements. Illustrations. References. Index.

The high infant mortality and morbidity of the tropics, subtropics and other less privileged parts of the world is undoubtedly linked with poor nutrition. In this monograph it is rightly pointed out that, to effect a general improvement of nutrition in population groups, it is necessary to have a better knowledge of existing feeding practices in those groups.

The author begins with a brief and interesting review of infant feeding through the centuries in the Western world. He goes on to a description of present-day methods in a large number of countries in Africa, the Middle East and Asia, which he himself has visited. In the sections on prevention and education he stresses that to modify ideas and so improve the practices of people in nourishing themselves and their children, is no easy task. He points out that the Maternal and Child Health Centre and its workers need a much more imaginative approach than has been usual in the past. Several useful suggestions are made on how to work with the people and how to make them enthusiastic about nutrition education.

The middle section of the book is concerned with an up-to-date, brief description of specific nutritional disorders, their differentiation, treatment and prevention. In particular, nutritional anaemia, avitaminosis A, infantile beri-beri, rickets, kwashiorkor, and marasmus, are extremely well clarified. The prevention of kwashiorkor is dealt with at length and there are some good coloured prints of the condition. A comprehensive bibliography of 313 references is included.

This is a very creditable World Health Organization publication and can be recommended to all those who have to deal with the problems with which it is concerned.

J.H.

ADVANCES IN INTERNAL MEDICINE

Advances in Internal Medicine. Volume II. Edited by William Dock, M.D. and I. Snapper, M.D. Pp. 311, with illustrations. 88.50. Chicago: Year Book Publishers, Inc. 1955.

Contents: 1. Pathogenesis and Treatment of Renal Lithiasis—Newer Concepts. 2. Hepatic Coma. 3. The Pathophysiology of the Pancreas. 4. Clinical Significance of Serum Mucoproteins. 5. Advances in Physiology of Clinical Disorders of the Adrenal Cortex. 6. Diseases of the Pericardium. 7. The Nephrotic Syndrome. 8. Applied Pulmonary Physiology. Indices.

It is the policy of the editors of *Advances in Internal Medicine* to present reviews on from 8 to 10 subjects per volume. These reviews are usually by writers in the particular fields who have in most cases themselves made contributions to knowledge in them. So we have in this volume C. S. Davidson writing on Hepatic Coma. The role of ammonia in the production of the neurological manifestations of cholaemia and the question whether we should give or withhold protein and amino acids in such cases, or perhaps give glutamic acid, are the substance of the more recent studies.

Butt discusses the pathogenesis and treatment of renal lithiasis and presents the case for subcutaneous hyaluronidase. He quotes

a recent report that oral glucuronic acid, which is a break-down product of hyaluronic acid, has a similar effect. ACTH and cortisone have the effect of decreasing urinary glucuronic acid. Butt does not mention the known effects of salicylates in this connection and the recent work which showed beneficial results in cases of urinary calculus.

Dreiling and Janowitz write on the Pathophysiology of the Pancreas. They discuss what we now know to be the secretin complex with its 5 hormones. They review the difficult subjects of the pathogenesis and diagnosis of pancreatic disease. They omit any mention of steroid therapy in pancreatitis.

Jailer reviews the clinical disorders of the adrenal cortex and surprisingly says nothing of aldosteronism.

McKusick and Harvey deal with diseases of the pericardium. It is worth mentioning that the neck veins often pulsate in cases of pericardial effusion, and so may the liver. The work of Isaacs *et al.* is quoted which shows that constrictive pericarditis constricts not the great veins but the chambers of the heart. McKusick himself has described an instance of 'constrictive endocarditis'.

Squire writes on the nephrotic syndrome, and discusses such aspects of the problem as the source of the urinary protein and the mechanism of oedema formation. He concludes that for the present the graded-pore theory of the glomerulus seems most readily to account for the known facts.

Greenspan deals with the subject of serum mucoproteins and their changes in disease—hepatobiliary disease, rheumatic and collagen diseases, etc.

Stone reviews the subject of applied pulmonary physiology. Elastic and viscous forces are discussed and the main topic is naturally that of emphysema.

F.F.

CANCER OF THE BREAST

Breast Cancer and Its Diagnosis and Treatment. First Edition. By Edward F. Lewison, B.S., M.D., F.A.C.S. Pp. 478 + xii with 181 illustrations and 4 coloured plates. 114s. 0d. London: Baillière, Tindall & Cox Ltd. 1955.

Contents: 1. The History of Breast Cancer and its Treatment. 2. The Surgical Anatomy of the Breast. 3. Physiology of the Breast. 4. Experimental Aspects of Mammary Cancer in Mice. 5. The Pathology of Cancer of the Breast. 6. The Relationship Between Benign Breast Disease and Cancer. 7. The Psychological Aspects of Breast Cancer. 8. Diagnosis. 9. Breast Biopsy. 10. A Review of the Surgical Treatment of Breast Cancer. 11. The Surgical Treatment of Breast Cancer. 12. Extended Radical Mastectomy. 13. Postoperative Care. 14. Prognosis. 15. Radiotherapy of Breast Cancer. 16. Hormonal Alterations in the Palliative Treatment of Breast Cancer. 17. Breast Cancer and Pregnancy or Lactation. 18. Self-Examination of the Breast. 19. The Statistics of Breast Cancer. 20. Cancer of the Breast in the Male. Index.

The Greek scholar, Porson, wrote that German philosophers dive deeper and come up muddier than their colleagues. With equal justice this might be said of writers on cancer of the breast. Surely, one exclaims, the subject does not warrant the publication of another book, and one costing £5 14s. at that. The dismal facts are known, the side-issues have been sufficiently dealt with in numberless articles, and the welter of statistics has been churned over, digested and regurgitated *ad nauseam*.

And yet no-one who reads this remarkable volume can fail to be impressed. As the list of contents shows, almost every conceivable facet of the disease is examined and almost every problem illuminated in the light of such knowledge as we possess.

In the last analysis what both doctor and patient want to know is the diagnosis, treatment and prognosis of cancer of the breast. And, of these, diagnosis is the simplest issue, treatment and prognosis the most complicated. We teach and are taught that the presence or absence of axillary gland metastases is of paramount importance in prognosis. But clinical assessment of axillary involvement is subject to gross error. Haagensen is quoted as showing that 44% of his cases had axillary metastases on microscopic study when the examiner had regarded the axilla as clinically innocent, and 15% were negative microscopically where clinical examination had been positive. Microscopic examination of the axillary glands, to be useful, means a study of all glands in serial section. This is time-consuming and expensive, with the result that most pathological reports on excised specimens are incomplete. Therefore if prognosis is to depend on knowledge of the state of the axillary glands a source of significant error arises in a majority of cases.

Even more alarming is the possible implication of internal mammary and supraclavicular glands. Handley and Dahl-Iversen

have made clinical staging even more difficult as a result of their work, so that in the words of the author of this book 'with true humility we must confess that despite prompt and adequate treatment we do not know precisely which individual patient will be favoured by fortune and granted a long survival'. But when we come to define 'prompt and adequate treatment' we are once again on uncharted seas. On the one hand are the therapeutic nihilists who tell us gloomily that no method available today influences the final result, on the other the radicals who want the breast removed the axilla cleared, the chest wall opened to extirpate the internal mammary glands and the supraclavicular nodes dissected in continuity—a formidable programme which has gained few adherents.

This book, reflecting Johns Hopkins teaching and tradition, favours radical mastectomy with radiotherapy for operable cases and radiotherapy for others. It rejects the McWhirter approach (see in this connection a valuable statement by Ackerman on the Edinburgh plan). There is a detailed discussion of the role of radiotherapy and hormone treatment, with much practical and useful information on the handling of patients.

All in all, this work is a massive contribution to the subject. It is a pity that every now and then the principal writer breaks into

Bombast—Babu English. What, for instance, does one do except squirm in discomfort, when one comes across sentences such as the following? '... in a patient with a large fungating tumour where there are firm fixed regional nodes in which metastases have undoubtedly passed through the shadow of the valley of the axilla' '... is the armour of education adequate to arouse curiosity in the common danger signals of breast cancer'. And what on earth does this mean? '... the epic of past experience has grimly indicated that cancer of the breast has never been at a loss for occasions and it is not unreasonable at present to forecast its continued malevolence'. And what has Heneage Ogilvie done to deserve being called 'the kaleidoscopic Sir Heneage'? Bombast—Babu dominates surgical writing to-day. Its disciples never discuss the treatment of piles. They write an evaluation of the modalities of treatment in ano-cutaneous varicosities. They adorn their shopworn prose with itsy-bitsy little tags from Osler, who was a bore anyhow, and they add pounds to the weight of surgical journals. A pox on them!

It is only fair to add, however, that chapters of this book are models of lucidity and that, despite these minor irritations, this reviewer will cherish his copy.

G.S.