BOOK REVIEWS

Calcium, Phosphate and Magnesium Metabolism

Ed B E C Nordin. (Pp 683; £22.50.) Churchill Livingstone. 1976.

The authors of this outstanding book are all members of the staff of the same department, namely the Medical Research Council's Mineral Metabolism Unit, and this produces more cohesiveness than is usually found in multiauthor texts. The hands of individual members of the unit are recognisable from the contents rather than from the style of the individual chapters. All aspects of the subject are very fully covered regardless of whether they have featured prominently in the unit's programmes or not.

The opening chapter on nutritional considerations brings together many data which are otherwise rather diffusely scattered in the literature and not very readily available to the non-specialist. The chapters on absorption, transport, and excretion of calcium, metabolism, and phosphate review these fields authoritatively and are obviously based on a thorough knowledge of the literature and wide first-hand experience. There is an equally valuable chapter on bone histology and micro-anatomy. The accounts of the pathophysiology of the parathyroid hormone, calcitonin, and vitamin D are lucid, up to date, and well balanced, though these are still growing fields where there will probably be developments in the future. The concluding chapters on diagnostic procedures and laboratory methods reflect the practice and wide experience of the Mineral Metabolism Unit. They contain many valuable lessons for all who have to deal with these problems in both clinical and laboratory practice.

It is a pleasure to recommend this book, which I predict will become a standard reference text.

R W E WATTS

Medical Education and the State

The Changing Pattern in Ten Countries. Ronald V Christie. (Pp 142; \$4.40.) Department of Health Education and Welfare. Washington. 1976.

This survey of the changing pattern in 10 developed countries was carried out by Dr Christie during his tenure as a Fogarty scholar. The Fogarty International Centre operates within the United States Federal establishment with the object of assisting the expansion of America's health research and care to lands abroad and for bringing the talents and resources of other nations to bear upon the health problems of the United States. Dr Christie, a senior medical academic personality, well known in Britain as London University professor of medicine at St Bartholomew's Hospital from 1938 to 1955, was unusually well qualified to do the survey, since his postgraduate medical career took him to the Rockefeller Institute, McGill University, and

the University of Freiburg. Between 1969 and 1973 he visited all the medical schools in Australia and New Zealand, nine in Britain, two in the Republic of Ireland, eight in Scandinavia and Finland, 14 in Canada, and five private and four state medical schools in the United States. The report is based mainly on the United States, Britain, Canada, Sweden, and Australia. A brief account of the five other countries is given in appendices.

The book is packed with valuable and interesting facts. Because traditions and social structure differ so widely among the countries, what may be good for one may be wholly unacceptable in another. For this reason facts predominate and judgments are few, which is understandable but disappointing in view of the range of opportunity offered. A distinction is drawn, however, between the changes in medical education due to the influence of the medical community and those due to public opinion or political expediency. At a time when unwelcome economies are being forced upon medical schools in almost every country the methods used by governments to assess academic needs for teaching and research deserve careful and critical study. Those whose duty and interest it is to advise and criticise governments will find in this book what they need both to inform and to stimulate them.

J W HOWIE

The Cervix

Ed Joseph A Jordan and Albert Singer. (Pp 529; £20.) Saunders. 1976.

This is a notable, new contribution to the literature on the physiology and pathology of the uterine cervix. The two editors are well known authorities who have contributed extensively to knowledge and understanding of various cervical conditions. The list of distinguished contributors who have assisted in the production of the book is a measure of the international standing of the editors.

The first six chapters cover the morphological basis of the cervix, giving first the traditional anatomical descriptions and then detailed accounts of the ultrastructure and histochemistry of the cervical tissues. The next section is devoted to an examination of the physiological changes that occur in cervical epithelium in the fetus and young girl, during puberty and adolescence, in pregnancy and the puerperium, and at the time of the menopause. Eight chapters are given to a study of the physiology and pathology of the cervix in relation especially to infertility. Professor R H Philpott introduces the next few chapters dealing with the structure and function of the cervix in pregnancy and labour including the effects of oxytocic drugs and prostaglandins on the pregnant cervix. Discussions of the influence of inflammatory diseases on the cervix (including viral infections) and the management of cervical injuries and anomalies precede an extensive examination of the

natural history, diagnosis, and management of premalignant and malignant diseases. The 17 chapters concerned with different aspects of cervical malignancy give a superb account of current knowledge of this important subject. The last chapter in this section is an account by Stanley Way of his personal experience of pelvic exenteration in the management of advanced cervical cancer.

The editors have been well served by their contributors, who write simply and clearly; their meaning is never in doubt. The text is profusely illustrated, and the comprehensive list of references at the end of each chapter makes this a valuable reference book. The work will appeal particularly to obstetricians, gynaecologists, and pathologists, but it will be of great value to all who have an interest in the structure and function of the cervix in health and in disease.

J K RUSSELL

The Physical Aspects of Radioisotopic Organ Imaging

K G Leach. (Pp 25; £1.50.) The British Institute of Radiology. 1976.

Introduction to the Principles of Diagnostic Ultrasound

H B Meire and P Armstrong. (Pp 13; £1.40.) The British Institute of Radiology. 1976.

Fundamental Aspects of Medical Thermography

W M Park and B L Reece. (Pp 36; £3.40.) The British Institute of Radiology. 1976.

Three teaching booklets have recently been published by the British Institute of Radiology. The aim of the series is to provide simple introductory texts on these topics primarily for trainee radiologists preparing for the part I FRCR examination, but also for radiographers, technicians working in the field of nuclear medicine, ultrasonics and thermography, and interested clinicians.

Although the titles vary the aim is to present fundamentals of the topic, a framework on which to build further knowledge and experience. A trainee radiologist introduced to a new imaging technique requires certain questions to be answered: What is the technique and what are its underlying principles? What are the clinical indications for employing the technique? How is the technique performed? What are the results? How does the patient benefit and are there any side effects or complications of the technique? Have these questions been answered?

The author of *The Physical Aspects of Radioisotopic Organ Imaging* has presented well and clearly described the materials and machinery employed in isotope organ imaging, but has said little about the indications and value of this type of investigation in the clinical setting. A simple table listing the organ to be

scanned, the recommended isotope, the type of scanning device, and the clinical value would reasonably be expected in such a booklet.

Introduction to the Principles of Diagnostic Ultrasound is a brief, simple, excellent presentation of the basic physical principles of the technique. The diagrams and illustrations are clear and easily understood, but again indications for the use and expected benefits in the clinical setting have not been included.

The larger booklet on *Fundamental Aspects of Medical Thermography* presents in an excellent manner, with fine illustrations, a free-flowing text, and a comprehensive bibliography all that is required for a basic working knowledge of the subject. Clinical indications and applications are outlined, and in some instances the results and diagnostic benefits of using thermography have been evaluated.

The first two of these booklets are too brief and ignore important aspects of their topic. What they do include is excellently presented, but it is to be hoped that when they are revised attention will be directed towards expanding them to include the clinical setting.

J EDMUND WILLIAMS

Cholera 1832

R J Morris. (Pp 228; £7.50.) Croom Helm. 1976.

In the 19th century there were four cholera pandemics, 1831-2, 1848-9, 1853-4, and 1885-6. The first three affected Britain and caused myriads of deaths and suffering. In the 1885-6 pandemic, although a few cases were imported, there was no epidemic spread because the sanitary engineers had by that time produced reasonably safe water supplies and were developing hygienic methods of sewage disposal. But in 1831, when the first pandemic was active in Europe, the outlook for control in Britain was very bleak. By the summer of 1831 the epidemic of Asiatic cholera had spread from Bengal across the Middle East to Russia and had been reported in Riga and Hamburg. The medical profession were ignorant of the nature of the disease and its mode of transmission and were divided on whether it was a contagious disease spread from person to person or spread without any contact with existing cases, and whether it was caused by changes in the atmosphere, vapour from the earth, or rotting organic matter. This "miasmatic" theory of infection was strongly supported by many medical men at that time.

This book sets out in detail the problems which faced the government in 1831 and the measures taken after much dithering and conflicting medical advice. They proved ineffectual to control the epidemic, which was estimated to have caused 21 882 deaths in England and 9592 deaths in Scotland. The government depended mainly on quarantine, which in the control of human infections has never been effective. In this instance it conflicted with commercial interests and led to concealment of the disease when it first occurred in Sunderland in October 1831. Although local boards of health were set up, they lacked legal authority and were not very effective. They failed to provide hospital accommodation to deal with the cases in an epidemic in which the poor suffered most.

At the time of the epidemic the medical

profession was divided into physicians, surgeons, and apothecaries, and this disunity, together with the activities of the resurrectionists, caused public distrust of doctors, who together with the body snatchers were the target for public anger. Although in recent years the administration of saline solution intravenously has proved so effective in combating the dehydration of cholera, it was first proposed by a Dr Thomas Latta, of Leith, in 1832, but never gained widespread acceptance. Technically it was difficult, and the risks from infection and septicaemia in those days before sepsis was known were considerable.

This is a most interesting account of the 1832 cholera epidemic, written by an economic historian. He shows how fear can cause even level-headed medical men to overreact. When the natural history of a communicable disease is understood, then it is easy to recommend sensible preventive measures, but as this detailed account of cholera shows, the government's medical advisers were ignorant of the causal organism and the mode of transmission. The book is well written, and a comprehensive bibliography is included.

ANDREW B SEMPLE

Clinical Skills

Ed Ian A D Bouchier and John S Morris. (Pp 654; £5.50.) Saunders. 1976.

The editors justify production of another textbook on clinical methods by pointing out that understanding and interpretation of symptoms and signs alter with the progress of medical knowledge. In considering the clinical evaluation of each body system they have tried accordingly to emphasise those aspects that are likely to prove useful and to discard procedures that yield little or no information. The chapter on the cardiovascular system perhaps exemplifies this approach: auscultation is dealt with in detail as it is considered important, but percussion of the heart is dismissed in a few lines. This chapter is particularly well written and packed with sound clinical information; it should prove most useful to the tyro clinician. In general the writing is clear and concise, and the editors have done a good job in keeping an even balance.

A further distinction from most textbooks of this sort is the inclusion of short sections on the investigation of each system. These are interesting to read but I doubt whether they will prove useful, as they are rather brief and might confuse the student more than they help. Do 5½ lines on the haematological investigation of the cardiovascular system contribute anything? The section on examination of the urine is inadequate but it is probably naive to expect students to examine the urine these days.

Inevitably, one can find some points to criticise. On p 243 the test for shifting dullness of ascites is not clearly explained—a diagram might have helped. Students, I find, are often confused by the temporary flaccidity of upper motor neurone paralysis caused by acute cerebrovascular accidents; it is a pity this was not even mentioned on p 333. My major criticism, however, applies to the illustrations. Some of them are quite useless; clubbing on p 26, spider naevi on p 214, or vitiligo on p 215 could be almost anything. Black-and-white reproductions of this sort do not do justice to these conditions. On the other hand

the simple diagrams and the tables are clear and helpful.

It is disappointing that so little "basic science" has been included. Here is such a good opportunity to help students to understand how normal and abnormal symptoms and signs are produced. Intrinsic spinal cord lesions and the Brown-Séquard syndrome, for instance, are considered without a discussion of the tracts involved or a diagram to clarify the clinical picture that results. A last comment: this, and many other similar textbooks, pay little attention to the diagnostic process. How does a doctor proceed when the appropriate information has been gathered? A few pages about this process might have helped the student to gain a proper perspective of the place of clinical skills and the use of laboratory investigations.

But these are not major criticisms and I recommend the text with warmth. It is well written and easy to read, full of sound common sense, and should illuminate many difficult areas of clinical assessment. Undergraduates should find it a useful and informative addition to their reading lists.

R HOFFENBERG

The Multiple Choice Question in Medicine

John Anderson. (Pp 152; £3.) Pitman Medical. 1976.

The use of multiple choice questions in medical examinations is still regarded with suspicion, and doubts are expressed about the efficiency of the method. Most examiners would now agree that it excels as a fair test of ability to recall facts, surely a necessary building block of professional competence in any sphere. It is also effective in discriminating between good and bad candidates. Few who have not been concerned with undergraduate or postgraduate examinations will realise the sophistication of the methods of testing and the rigorous analysis of results in order to establish the method. John Anderson writes with lucidity and experience about the development of the multiple choice questionnaire and the effective test formats in present use.

The book is a series of essays on such topics as the setting of multiple choice questions, their marking, and their evaluation. The important subject of question revision and feedback is discussed. It is interesting to see how a good multiple choice question can be produced from one that was unsuccessful by the alteration of a single imprecise word.

A useful appendix gives 150 questions that cover a wide field of medicine and have been used successfully in medical examinations at Newcastle. This book will be enjoyable and informative reading for those about to sit medical MCQ examinations and for those who have to set them.

J S MALPAS

Malnutrition and Intellectual Development

Ed J D Lloyd-Still. (Pp 194; £8.95.) Medical and Technical Publishing. 1976.

In his introduction to this book Lloyd-Still points to malnutrition as the major problem in child health today, affecting perhaps 100 million children. He quotes Dobbing for the view that fetal and childhood malnutrition play