

Gastroenterological procedures

Manual of Gastroenterologic Procedures. 3rd ed. Ed. by D. A. Drossman. Pp. xv + 288. Illustrated. \$44. New York: Raven Press, 1992.

This is the third edition of a most successful manual on the full spectrum of gastroenterological procedures. The strength of the manual lies in the detailed listing of the required equipment and the step-by-step description of the procedure. In addition, each chapter includes a synopsis on the indications, contraindications, preparation of the patient and potential complications. No fewer than 40 procedures are covered, including non-endoscopic procedures such as oesophageal manometry, liver biopsies, feeding-tube intubation and procedures in paediatric patients. Several changes have been made to the previous edition, with new chapters covering the advances made in gastroenterology over the last 5 years.

This pocket manual is strongly recommended for gastroenterologists in training, technicians, nurses and students working in the field of gastroenterology.

P. C. BORNMAN

Safety in diagnostic ultrasound

Exposure Criteria for Medical Diagnostic Ultrasound: I. Criteria Based on Thermal Mechanisms. (NCRP Report No. 113). Pp. xv + 278. Illustrated. Bethesda MD: NCRP, 1992.

This publication from the USA is one in a series addressing the problem of safety criteria for diagnostic ultrasound. It specifically discusses the possible causes and effects of temperature elevations induced by ultrasound, a basic knowledge of which would be essential to the doctor working in the field.

The underlying theory is described extensively, so that the average practitioner need probably be familiar only with the chapter entitled 'Conclusions and recommendations'

(conveniently printed on the yellow pages 153 - 172). Particular note should be taken of the 'worst-case' conditions that could occur when testing or designing new equipment or techniques. The informed user of ultrasound should be aware of the concept of the 'thermal index', which this report defines and explains, and of its application to the clinical situation.

This report should be available in medical libraries for reading by specialists in training and reference by workers wishing to explore new applications of ultrasound. It would be essential reading for anyone involved in designing ultrasound equipment.

L. M. M. MULLER

Knee arthroplasty

Total Knee Arthroplasty. Ed. by James A. Rand. Pp. xiv + 464. Illustrated. \$162.50. New York: Raven Press, 1992.

This superb monograph owes much to its editor, James A. Rand, who has also written or contributed to 10 of the 29 chapters. Of 38 contributors (including the editor) 11 are from the Mayo Clinic, and all except two are American.

The book does not confine its scope to technical knee arthroplasty. It is about whether and why it should be done, what alternative procedures might be available, how it should be done and what happens if things go wrong. Finally, the book considers what has happened in the past and what will happen in the future.

Detail is meticulous. There is minimal repetition and satisfyingly tight editing. Here is a book by perfectionists, extensively researched, documented and annotated. Carping at relatively infrequent errors would be unfair to its merits.

This book will justify its price for the surgeon aspiring to knee replacement surgery. Indeed, a surgeon attempting knee replacement without reading this book could have his commitment questioned.

J. P. DRIVER-JOWITT

BOOKS / BOEKE

Drug-induced skin changes

Cutaneous Drug Reactions. An Integral Synopsis of Today's Systemic Drugs. 2nd ed. By K. Zürcher and A. Krebs. Pp. viii + 570. SFr. 496. Basel: Karger. 1992

Drug-induced skin changes may be recognised from personal experience, but the attribution to a specific drug derives from the collective experience of published evidence. The authors started their work on cutaneous drug reactions to systemic drugs in 1970 and the 5 600 references in this volume were collected until mid-1991.

The book offers thorough and updated information on skin-related complications in a synoptic presentation. The main parts consist of drug tables and sign/symptom tables, substantiated in a large bibliography and indexed in detail. When looking for the cutaneous reactions from a particular drug, the drug number may be found by looking up the generic name in the index, and this leads to the corresponding drug table. This table provides the references to the bibliography, the rates of cutaneous reaction in the treated population, the various cutaneous reactions reportedly caused by a particular drug, etc. The sign/symptom tables present the different cutaneous signs, symptoms or syndromes, each with its inducing drugs, and many with rates and references. Bold type is used for frequent and/or important inducers and this may facilitate therapeutic decisions.

Cutaneous drug reactions are to be expected in about 1/40 - 50 patients. This book should be helpful to many doctors, especially dermatologists, to identify the probable culprit. However, it offers no clinical descriptions and informs on pathophysiology, diagnostic steps, or therapy only where these are of special interest. It cannot, therefore replace clinical textbooks.

DE K. SOMMERS

Rabies

WHO Expert Committee on Rabies: 8th Report. Technical Report Series No. 824. Pp. vii + 84. SFr. 12. Geneva: WHO. 1992.

Judging by the telephone enquiries received at a virus laboratory, clinicians know little about pre-exposure immunisation and post-exposure treatment for rabies, although there are specific guidelines on the package insert that accompanies the vaccine. Guidelines are laid down periodically in the Reports of the WHO Expert Committee on Rabies, and these are used by national health authorities and vaccine manufacturers in formulating their own specific recommendations.

The WHO is also engaged in disseminating information, co-ordinating research, establishing standards for biologicals and facilitating transfer of technology for the investigation and control of rabies, or for preparation of vaccines, from developed to developing nations. Over the years, the Reports of the Expert Committee have stood out as beacons that encapsulate the current state of knowledge of disease and point out the directions in which future research should be conducted. The 8th Report is no exception and is probably the most comprehensive of the series to date. Experts in rabies control and research will be familiar with and seek out detailed scientific literature on the subject, but for those wanting a brief introduction to the disease and answers to specific questions concerning pre-exposure immunisation and post-exposure treatment, the 8th Report is highly recommended.

Dog rabies, and hence human rabies, is highly prevalent in Natal-KwaZulu, but has recently extended to the Transkei and Ciskei, and is also present in the northern Transvaal. Elsewhere in South Africa, there is endemic mongoose rabies, and domestic animals and humans are less often affected. The so-called human diploid cell culture vaccine is used in South Africa, but it emerges from the Report that a new generation of somewhat less expensive and equally safe and effective vaccines has gained WHO

approval. Furthermore, the criteria for determining risk after potential exposure to infection have been simplified, and in addition to the standard regimen of vaccine administration, two abbreviated schedules of vaccination have been approved for use in certain post-exposure circumstances. These have the effect of reducing costs and the number of visits to clinics that patients are required to make — important considerations in developing countries.

R. SWANEPOEL

Entomology and malaria

Entomological Field Techniques for Malaria Control. Pp. 77. SFr. 15. Geneva: WHO. 1992.

The World Health Organisation has published a pair of guidebooks intended to assist malaria control programmes, which are in force in many tropical and subtropical countries.

Part I, the learner's guide, contains 13 learning units that deal with basic tasks like the collecting of mosquitoes in the field, to sophisticated methods of mosquito, larva and pupa collection. In addition, many useful facts on malaria and the entomology of the mosquito vector are covered. Great emphasis is placed on complete and accurate records and the maintenance of equipment in good working order, and the learner's guide is easy to read and understand with excellent diagrams and explanations.

Part II, the tutor's guide, has been designed for use by those running educational courses, and advises those responsible for conducting and assessing the value of training programmes. The tutor's guidelines will help learners become as proficient as possible in the field techniques covered. The guide is designed to be adaptable to facilities available, the requirements of malaria control services in a particular country, the learner's needs and the tutor's experience and skill. Annex 2 at the end of Part II is a useful section of questions that allow for the evaluation of the training programme by those attending the training course.

The set of training books comes in a pair, but it is obvious that for every one tutor's guide there may have to be several learner's guides for use on a course.

The entomological accent of the two books makes it unlikely that they will be of value or of interest to clinicians, among whom there is likely to be limited readership. Nevertheless, the books are invaluable for educational purposes with a view to mosquito and malaria control. The WHO is to be congratulated on its never-ending efforts aimed at malaria control and eradication.

F. H. N. SPRACKLEN

Handbook of PCVC

Handbook of Percutaneous Central Venous Catheterisation. 2nd ed. By M. Rosen, P. Latta and S. Ng. Pp. viii + 249. Illustrated. £19.95. Kent: Harcourt Brace and Jovanovich. 1992.

This publication contains a comprehensive description and evaluation of all techniques used for central venous catheterisation. It is practical, the text is well laid out and the descriptions of techniques easy to follow and simplified with simple line drawings. There are useful tables of the different techniques, their success rates, and complications.

This edition has been expanded to include a useful section on paediatric procedures, and it is also updated by including all the recently introduced catheter advances. The only shortcoming is the limited section on pulmonary artery catheterisation, and the scant attention paid to catheter sepsis.

This useful guide to central venous catheterisation should not only be available in all medical libraries, but should also be accessible in all ICUs, and anaesthetic, accident and emergency departments.

P. D. POTGIETER

BOOKS / BOEKE

HIV/AIDS resource directory

Resource Directory for HIV and AIDS. Compiled for ATICC by Stewart Harris and Geoffrey Taylor. Pp. 83 + iv. R25. 1992.

This directory was compiled by the AIDS Training, Information and Counselling Centre (ATICC) in Cape Town. It provides a comprehensive list of education and health care resources in the western Cape, but similar directories are being prepared or have been prepared by ATICC centres throughout the country. Key contact addresses of other centres in South Africa are given.

The first 25 pages are devoted to educational resources, including puppet shows, journals and videos. A section on care lists all facilities for testing, counselling, inpatient and outpatient care, hospices and bereavement counselling. The directory is current and is updated onto the data base maintained by ATICC. It is an invaluable list of resources covering every aspect of HIV and AIDS, and should be available in all clinics, hospitals and public libraries. Larger companies, all of whom need a specific HIV policy for their work-force would also benefit from acquiring it.

ATICC are to be congratulated in producing this directory. It is a major step towards co-ordinating resources in the various regions. The potential resources available in response to the HIV epidemic are enormous. To date, however, the response has generally been pretty fragmentary.

G. MAARTENS

Laparoscopic surgery

Atlas of Laparoscopic Surgery. Ed. by E. J. Reddick, with W. B. Say and J. D. Corbitt jun. Pp. ix + 116. Illustrated. \$122.50. New York: Raven Press. 1992.

This book, edited by one of the pioneers of minimal-access surgery in the USA, covers the technical aspects of laparoscopic cholecystectomy, appendicectomy, vagotomy, left colon resection and herniorrhaphy.

The strength of the book lies in the detailed step-by-step description of the various operative techniques. In addition, the book also provides useful guidelines for the management of the many pitfalls the surgeon might encounter during these procedures. Perhaps one shortcoming is the paucity of line drawings, which would have complemented and clarified the operative photographs. The book also does not cover the full spectrum of operations for peptic ulcer, colon resections and herniorrhaphy. Despite these minor criticisms, both the beginner and the more experienced endoscopic surgeon will find this book a useful addition to their reference library.

P. C. BORNMAN

Medical history

The Illustrated History of Medicine. By Jean-Charles Sournia. Pp. 585. Illustrated. R570. London: Harold Starke. 1992. (Distributed by Medical Association of South Africa, Private Bag X1, Pinelands 7430).

The individual author who undertakes to write a History of Medicine at the end of the 20th century faces a formidable task. The literature on the subject is now so vast, that maintaining a sense of proportion to present a balanced overview challenges the individual intellect to such an extent that it could overwhelm it. It takes a very special person, one of great scholarship, erudition and humanity to hold the balance; one who would, during the Italian Renaissance have been termed *un uomo unico*, a unique man. The writer of this book, Professor Jean-Charles Sournia is such a man, and he was written a unique book. For a start, he possesses the supreme advantage of being French. And France is a country with a habit of producing men of great learning who have a gift of retaining their imagination, their human-

ity and a very special deft touch when it comes to describing human interrelationships, and here it is difficult to avoid the use of the French word *flair*.

Professor Sournia is a surgeon by profession, but is also an international expert and author of many works on the history of medicine, some of which are standard works of reference. A distinguished academic who has held key posts in medical faculties in Beirut, Rennes and Paris, he is at present President of the Health Club of Europe, Public Health expert for the Council of Europe and the World Health Organisation and President of the Commission on Toxic Waste in Chemical Products.

The book is divided into 13 chapters, which span the entire spectrum of human history, and cover the history of medicine from the disease of prehistory to the state of world health today. It is magnificently illustrated with black and white and colour plates from all over the world, and is written in an easy-to-read, stimulating style that makes it far more than a dry work of reference. The author not only knows his subject, but loves it, and this love shines through in the presence of illuminating textual minutiae so often missing in more prosaic chronicles. What is, I believe, of the greatest significance, is that not only has he managed to give a convincing picture of medicine as it has developed through the ages, but also an impression of the evolution of human consciousness, of which changing fashions in medicine are an integral part, and it is this which makes it such fascinating reading.

Although I have no hesitation in recommending this book, there are some criticisms, the main one being the lack of a comprehensive index, apart from a list of the contents of the individual chapters. Such an index would, I feel, have rounded off the book and made it easier for the reader to track down individual topics. However, there is an exhaustive index of individual names, and a comprehensive bibliography and list of illustrations.

There are also a few other minor anomalies, such as the spelling of the name of the great Hungarian obstetrician as 'Sommelweis'. Whether one calls him by his German name of Ignaz Phillip, or his Hungarian name of Ignac Fülöp, I have never seen his surname spelled other than Semmelweis, although an extra terminal 's' sometimes creeps in. I also have a personal prejudice against the spelling 'Asclepius' for the Greek god of health rather than 'Asklepios', which is a more accurate transliteration of the Greek Ἀσκληπιός, or Aesculapius, its Latin equivalent. But these are minor quibbles and do not detract in any way from the majestic whole, which would not only grace any bookshelf, but be its centre point. It is superbly written, superbly illustrated and superbly produced on high-quality paper. It is not an inexpensive book, but it is unreasonable to expect that it would be. When a book of such high class quality is on offer, it should be a pleasure and a privilege to pay for it.

N. C. LEE

Plants in Cardiology

Plants in Cardiology. By A. Hollman. Pp. vii + 40. £7.50. Illustrated. London: BMJ. 1992.

Rather like the young town dweller who thought that milk came from bottles rather than cows, many of us forget the debt we owe to medicinal plants. It is a sobering thought that many more probably wait to be discovered than have been found so far.

You probably thought that you knew all about cardiac remedies derived from plants; if so, this booklet might surprise you. Most are aware of digitalis and some of the other glycosides, but how many know that we owe amiodarone, nifedipine and sodium cromoglycate to the herbaceous Mediterranean plant *Ammi visnaga*? And did you know the *Crotalaria* species can cause pulmonary hypertension? Nor did I, so if you like digging for this sort of information, you will enjoy this little book.

N. C. LEE

BOOKS / BOEKE

Fraud in medical research

Fraud and Misconduct in Medical Research. Ed. Stephen Lock and Frank Wells. Pp. xi + 202. £27. London: BMJ. 1993.

Thinking the unthinkable is never a very comfortable pastime, and doing something about it can be even less comfortable, particularly where professional reputations are concerned, and where a great deal of money may be involved. Many would prefer to think that fraud in medical research is incompatible with the honest search for truth that should be its driving force, and that fraud is so rare that it can be disregarded as a significant factor. Unfortunately, the evidence suggests otherwise, as this disturbing book so clearly illustrates, and the reader is left with the uncomfortable feeling that only the tip of a large iceberg has been revealed.

Journal editors are of course aware that papers based on fraudulent research may be sent to them for publication, and it has been suggested that uncovering fraud is one of the editor's functions. Although editors may in some cases take on the role of whistle-blower, they may not be in a good position to do so, largely because of unfamiliarity with a particular field or the people in it. However, in one respect, the duty of editors who have published work afterwards found to be fraudulent is clear. They **must** publish a retraction, and must also clearly label it a retraction so that it can be picked up by the National Library of Medicine and Medline and published as such.

The main onus of uncovering fraud must remain with research institutions, which need to have a laid-down protocol when suspicions of fraud arise, and this book contains excellent appendices with model protocols for guidance. Some of the case histories described are hair-raising, particularly as whistle-blowers have often been pilloried more than the fraudulent researchers, and it is clear that in those cases, the institutions concerned were much more concerned with keeping things quiet than with putting things right.

Stephen Lock, past editor of the *British Medical Journal*, and Frank Wells, Medical Director of the Association of the British Pharmaceutical Industry have done a first-class job in compiling this book, which should be required reading for heads of academic departments engaged in research, all researchers, journal reviewers and editors.

N. C. LEE

Anaesthesiology in emergencies

Bailliere's Clinical Anaesthesiology: Emergency Medicine and the Anaesthetist. Ed. by H. H. Deloos. Pp. xi + 212. Illustrated. £27.50. London: Baillière Tindall. 1992.

This issue of Bailliere's *Clinical Anaesthesiology* series covers the major aspects of trauma and emergency medicine in 13 comprehensive chapters, each authored by an international expert in the field. The introductory chapter provides a historical and latterday overview of the status of the discipline, stressing the need for a well-organised, multidisciplinary approach incorporating all the objectives of an independent unit. This includes the need for management, training, education and research within a department of emergency care.

The next chapters involve excellent clinical dissertations on the final end-point of patient management, the provision of oxygen delivery appropriate to requirements. The section on oxygen debt is authored by Shoemaker himself, and provides hard and convincing data confirming the need for an aggressive clinical measurement and management approach to the polytrauma victim.

Scoring systems are covered very comprehensively by Champion, and will provide a useful reference for those involved with audit and its impact on patient care. The chapter on prehospital emergency care is aimed more at the

administrator than the clinician, and contrasts American and European attitudes on a variety of subjects, including transport by helicopter.

The chapters on anaesthesia, pain management and resuscitation for the trauma victim focus on clinical aspects, and the practical recommendations will appeal to those who have to manage traumatised patients as part of their daily practice. Guidelines are provided for the problems associated with airway management, selection of drugs, hypothermia and transfusion in the pre-operative and post-operative periods. The physiological backdrop to appropriate pain therapy is concisely presented, and provides a rational base for effective practice in this oft-neglected aspect of patient care.

The chapter on interhospital transfer of patients contains practical information on flight physiology and the impact on specific clinical conditions and medical equipment.

The penultimate chapters deal with audit and education in emergency medicine, and the ethics involved in dealing with the dying. The final section on disaster medicine again contains an excellent balance of practical clinical advice and management philosophy. This good mix typifies the content of this publication, which will appeal not only to anaesthesiologists, but any clinician, manager or administrator involved in trauma and emergency medicine.

D. F. MORRELL

BMJ literary extracts

Soundings from BMJ Columnists. Ed by Ruth Holland. Pp. xi + 89. London: BMJ. 1992.

One advantage of having a large catchment area of literate doctors, such as that enjoyed by the *BMJ*, is that not a few of them will want to write for it. Some of them may even be good at it, and are happy to provide the chatty articles that appear at the end of the *BMJ*, called 'Soundings', to lubricate some of its drier, more up-market content.

The better known of these include Tony Smith, Trisha Greenhalgh, and George Dunea, all of whom work hard at fulfilling Richard Smith's wish to make the *BMJ* a medical journal that people will want to read in bed. Even if you don't particularly want to read the *BMJ* in bed, you can read this entertaining collection of stories, which has been compiled from it, and which is guaranteed to inform, entertain and amuse.

N. C. LEE

Chest imaging

Atlas of Chest Imaging: Correlated Anatomy with MRI and CT. By Marvin Wagner and Thomas L. Lawson. Pp. ix + 134. Illustrated. \$100. New York: Raven Press. 1992.

This book will be a welcome addition to the shelves of those who interpret magnetic imaging examinations; but it would probably be of value only to this group of practitioners.

The pictures of the sequential axial, coronal and sagittal magnetic resonance (MR) examinations of the thorax are clearly delineated and well labelled. The corresponding anatomical planes and the axial computed tomography (CT) examination pictures add to the understanding of the MR images.

For those who wish to study the anatomy of the chest, other books such as the author's own larger publication, *Segmental Anatomy: Applications to Clinical Medicine*, published by MacMillan in 1982, from which the anatomical pictures in this book were taken, are available. Similarly, other publications are available for those learning CT.

The price of ±R270 reflects the number of pictures with little accompanying text.

H. T. GOODMAN

BOOKS / BOEKE
Knee meniscus

Knee Meniscus: Basic and Clinical Foundations. Ed. by Van C. Mow, Steven P. Arnoczky and Douglas W. Jackson. Pp. xi + 190. Illustrated. \$111,50. New York: Raven Press. 1992.

In 204 pages, 30 Americans, two Canadians and an Englishman (half with scientific or veterinary backgrounds) provide a solid cornerstone for the scientist in this aspect of knee function. The cellular, geometric and pathological anatomy of the meniscus is addressed in good detail, condensing an extensive bibliography. It is pleasing to see engineering snuggling closer to the biological aspects of orthopaedics in a sound chapter on a biphasic finite element model by two aeronautical engineers.

'Hope and forward-looking thoughts' are represented by chapters on meniscal allografts and transplantation. More conjectural is a chapter on prosthetic meniscal replacement, while a chapter on laser application is theory from which little of clinical application can be deduced.

The mechanical componentry of the knee joint is confronted in this monograph. Unfortunately, no acknowledgement is made of the dynamic, neurological control of the knee, which is the primary component in its stability, functional success and pathophysiology. Until the biology of the spatial orientation and reflex neuromuscular stabilisation of the knee is fully understood, treatment to 'point of best recovery' will not be reached, however ingenious the mechanistic technology.

J. P. DRIVER-JOWITT

Cryptorchidism

Descent of the Testis. By John M. Hutson and Spencer W. Beasley. Pp. 187. Price: £45. Illustrated. London: Edward Arnold. 1992.

This is undoubtedly one of the best monographs on cryptorchidism to appear since the publication in 1971 of Scorer and Farrington's *Congenital Deformities of the Testis and Epididymis*, which has become a classic reference work. Hutson and Beasley, paediatric surgeons from Melbourne, Australia, have in recent years conducted a great deal of innovative research on testicular descent, and are eminently qualified for the task of providing a comprehensive update on the many puzzles and problems in the management of the undescended testis.

The book starts by discussing testicular descent in different species, and briefly reviews early research dating from John Hunter's description of the gubernaculum in 1762. Perhaps the most interesting chapters are those devoted to the many theories on the mechanism and cause of testicular descent, to which Hutson and his co-workers have contributed a few ingenious theories of their own. The first is that transabdominal descent is controlled by müllerian inhibiting substance, which is thought to be responsible for the 'swelling reaction' of the gubernaculum. The second is that androgens control inguinoscrotal descent by acting on the spinal nucleus of the genitofemoral nerve, which is thought to secrete a neuropeptide transmitter (possibly calcitonin gene-related peptide) as 'second messenger' controlling the migration of the gubernaculum. Hutson and Beasley support their theories with great enthusiasm and an impressive array of experimental studies, but they maintain the necessary scientific perspective by emphasising that much more work is required before these theories can be generally accepted.

The book discusses the incidence, classification, causes and postnatal effects of cryptorchidism. A separate chapter is devoted to the diagnosis, including many useful hints on the physical examination, as well as detailed information on the use of imaging studies and laparoscopy for localising the impalpable testis. The authors' bias is (justifiably) towards operative rather than hormonal treatment, and they provide excellent descriptions and illustrations of various surgical

techniques. Apart from a few minor misprints (p. 108: selective renography instead of venography for localising the impalpable testis) the only major erratum I could find was in the brief chapter on hormonal treatment (on p. 149 the dose regimen for luteinising hormone releasing hormone is given as milligram, whereas the correct dosage is microgram).

The authors advocate early orchidopexy (about 12 months, and certainly before 3 years) but in reviewing the results of treatment they rightly conclude that the putative benefits of early orchidopexy are as yet unproven (and may remain unproven, unless prospective, randomised studies of early versus late orchidopexy are performed). The authors maintain that in paediatric surgical centres, early orchidopexy is not associated with an increased risk of vascular injury and subsequent atrophy of the testis. But they concede that even paediatric surgeons acknowledge a 2% incidence of testicular atrophy after simple hernia repair in infancy. In view of the unproven benefit of orchidopexy at 12 months, and the greater risk of injury of the delicate vessels and vas, early orchidopexy should not be indiscriminately performed by surgical trainees or general surgeons who see the occasional undescended testis.

This is an extensively researched and well-written book, which promises to become a classic reference source for urologists, paediatric and general surgeons, paediatricians, andrologists, and basic researchers interested in the embryology and endocrinology of testicular descent, or the effects of cryptorchidism.

C. F. HEYNS

Radiosurgery

Radiosurgery: Baseline and Trends. By L. Steiner. Pp. xiv + 302. Illustrated. \$131,50. New York: Raven Press. 1992.

Lars Leksell, one of the most remarkable neurosurgeons of this century, in 1949 designed a stereotactic instrument used at first for more 'functional neurosurgery' and adapted in 1951 for radiosurgery with a variable width collimator attached to an orthovoltage X-ray tube to the stereotactic frame. By this mechanism, an intracranial target could be irradiated through a large number of small stationary portals, resulting in three-dimensional distribution of beams to the target. The mode of radiation has varied through the years and the present method is gamma-ray beams emitted from cobalt 60 sources. With various technological innovations and modifications, radiosurgery has become an established mode of therapy in deep-seated lesions within the cranial cavity.

This book forms the proceedings of the first symposium of radiosurgery held in Charlottesville, Virginia in May 1989, and should be consulted by anyone interested in the technical problems, methodology, planning and complications of this form of therapy. It is written in the most lucid style by people of high standing in this field, and is a model of such writing. Indeed, the stamp of quality is clearly evident.

Most clinicians may not be interested in the technological background, but for them the interesting opening up of radiosurgery for small acoustic neuromas, pituitary tumours, uveal melanomas, and in particular for deep-seated vascular malformations, should be of interest and is well dealt with in this publication. The particular problem of post-irradiation oedema and radionecrosis is dealt with in the final technical chapter. Unusual for a book of this type is the inclusion of the biographical sketch of Lars Leksell, written by his son, as well as an autobiographical gem, 'Brain fragments', by Leksell himself.

This book, expensive as it is, is highly recommended and should be in the reference library of any teaching hospital and certainly on the shelf of any progressive neurosurgeon.

J. C. DE VILLIERS