

BOOK REVIEWS

CHEST PHYSIOTHERAPY IN THE INTENSIVE CARE UNIT. COLIN F. MACKENZIE, M.D., Ch.B., Editor; NANCY CIESLA, P.T., P. CRISTINA IMLE, P.T., NANCY KLEMIC, P.T. Baltimore/London, Williams and Wilkins, 1981.

THIS IS A 260 page soft cover book with a modest title which, although dealing mainly with chest physiotherapy in the Intensive Care Unit, covers quite extensively some related aspects of physiotherapy for the critically ill patient as well. The book is beautifully organized and clearly printed on fine quality paper which makes it a pleasure to read. Its index and its references at the end of each chapter provide easy access to the problems which one wishes to learn about and also easy access to the current literature.

The descriptions and evaluations of the techniques used are based on the experience of the Maryland Institute for Emergency Medical Services in Baltimore and therefore has a large component of trauma patients. The patient population is unique and relatively homogeneous which allows for a standardized protocol of therapy permitting evaluation of each individual component of the therapy in a way which is most valuable. The cumulative experiences of the authors and the editors are impressive and add weight to their opinions of the efficacy of treatment which is a current practice. Although the scientific basis of physiotherapy is not fully established and many areas of controversy and opinion still exist the objective evidence which is available is clearly quoted and the areas of controversy clearly outlined. A statement of practice and the evidence for its efficacy is given in a very clear and concise manner.

One of the clearest deficiencies in the undergraduate and postgraduate training of physicians today is a lack of understanding of the practice of physiotherapy. This has produced difficulties for the physician, the patient, and the physiotherapist. This book on the reading list of every medical student, resident, and practicing physician would go a long way to resolving the difficulties. It can be read quickly and easily and has great clarity of expression with excellent photographs and illustrations.

For the physician working in the Intensive Care Unit, the book will be of great assistance in establishing practical routines for patient care. It

also highlights the areas of uncertainty where additional research is required, and I would hope that it would stimulate further studies on the efficacy of various physiotherapy manoeuvres in the management of patients who are critically ill.

This book deserves a five star rating.

A.A. SCOTT

INTENSIVE CARE MANUAL. T.E. OH, Editor. Woburn, Mass., Butterworth's. 1981. Price \$29.95 U.S.

THE NUMBER OF books on intensive care being published has increased in proportion to the recognition of the importance of intensive care units in providing adequate care for patients who are seriously ill. The type of books that have been published however are either very specialised, restricting their discussion to one or two specific topics or very basic, addressing themselves to a superficial discussion of most of the techniques and treatments used in an intensive care unit. There has evidently been a need for a text that delves into more detail and the fine points of caring for these patients.

This book fills this gap to a significant degree and attempts to present the essentials of care while at the same time providing ample references for the individual who wishes to learn more about a particular topic. It tries to present a broad opinion about topics and does an admirable job of maintaining a "non-partisan" approach considering that it is written by a group of doctors working in one hospital. It is directed to the individual who has some knowledge in the actual practice of intensive care medicine and who is conversant with the practical aspects of providing care. It presents in succinct form the accepted methods of management of patients presenting with common intensive care conditions and the authors are to be commended for squeezing so much practical information into such a small space.

I would recommend this book for any resident starting intensive care and also as a manual for those doing intensive care. It would also be profitable reading for all trainees in anaesthesia, surgery and medicine for the details that it provides in the acute care of patients. The only criticism that I would have relates to the size of

the book, which is too large to insert in one's pocket. This is a book that should be used as a *vade mecum*.

W. CASSAR-DEMAJO

CATHETERIZATION TECHNIQUES FOR INVASIVE CARDIOVASCULAR MONITORING. CASEY D. BLITT, B.S., M.D. Springfield, Charles C. Thomas, 1982. Price \$28.75 U.S.

This short monograph (110 pages, including index and bibliography) is divided into four chapters:

1. General principles.
2. Canulation of the arterial system.
3. Central venous system canulation.
4. Pulmonary artery catheterization.

The first chapter presents general information about catheters, guide wires, monitors, flushing devices, suturing methods, etc; thus, it could best be titled: "Devices and current practices." It is illustrated with numerous pictures of ready-to-use trays and of catheters and guides of different types and sizes; some of these pictures could advantageously be replaced by a good drawing illustrating the main differences.

This remark notwithstanding, this chapter contains plenty of useful information. However, page 7 contains what I believe is a mistake: is Teflon really the stiffest of the available catheter materials?

I would like to add a word of caution about central venous pressure monitoring with a simple water manometer, as recommended by the author (page 15): while I tend to agree with that statement, I recommend that an unexpectedly high reading should be controlled by oscilloscopic display to eliminate the possibility of the catheter having slipped into the right ventricle, thus giving a ventricular pressure which cannot be easily diagnosed on a water column.

From the point of view of style, I see no good reason for using length measurements in inches in the text and in centimeters in the legends of pictures.

Chapter two, about canulation of the arterial system, presents a good description of radial artery canulation; the author simply mentions that the dorsalis pedis artery is canulated in the same manner and that the femoral and brachial arteries are best canulated utilizing a pure Seldinger technique; thus, this chapter is quite incomplete on that topic.

In chapter three, about central venous system canulation, the author chooses to describe his preferred approach to the internal jugular vein simply mentioning that various techniques have been described. The reader interested in the relative merits of different approaches will do better to look elsewhere.

Generally speaking, a monograph is expected to be more complete on a particular topic than a text book chapter, which cannot afford to be as thorough. I doubt that this book fills the definition of a monograph and the general impression after reading it is that it was somewhat hastily written.

Despite the author's claim in the introduction that he will discuss complications for each technique, these are simply enumerated or presented very briefly; for example, the description of the complications of the radial artery canulation fills a single page; the same goes for central venous pressure monitoring complications. For example, while long term catheterization is stated to be the main source of complications, no mention is made of a safe duration of arterial or venous catheterization.

Likewise, there is an impressive bibliography of 206 references, but it is presented as a reading list. Nowhere in the text does a number indicate a specific reference nor is any author ever mentioned; this method is quite unusual.

I would not recommend this monograph: it is incomplete and it does not deal properly with complications.

MARCEL BOULANGER

PHARMACOLOGY OF NEUROMUSCULAR FUNCTION. W.C. BOWMAN. Baltimore, University Park Press, 1982. Price \$19.75 U.S.

THE AUTHOR of this monograph states that it is intended to "meet the needs of both anaesthesiologists and nurse anaesthetists." Unless the latter group is singularly well-versed in pharmacology, neuro-anatomy and biochemistry, I should imagine that they will find it rather heavy going. However, that is their problem. For the interested anaesthetist there is much meat in this small volume and a thoroughly good review of neuromuscular pharmacology. The author starts with the assumption that we all need some general revision of the ultrastructure of striated muscle, the physiology of excitable membranes and the mechanics of neuromuscular transmission. It is unlikely that any of us will suffer from

this and these chapters are well done. No one can fail to be interested in the effects of botulinum toxin, tetanus toxin and β -bungarotoxin with their fascinating insights into the function and dysfunction of the neuromuscular junction.

In addition to a thorough discussion of succinylcholine, tubocurarine and related drugs which are in common use, the author touches upon some of the newer neuromuscular blocking agents which are waiting in the wings and which may prove to be useful in our anaesthetic practice. It is a pity that he cannot comment at greater length on the clinical experience of some of these drugs for in a few instances this is quite extensive, albeit that such agents are not generally in use in Canada. However, as the author disarmingly states in his preface, he has not "even once administered a drug to a human patient" and one cannot fault him for his caution.

All the chapters are extensively referenced and this is done in the style of some of the British journals. Some North Americans may find this disturbs the easy reading of the text. However, one soon becomes used to the frequent parenthetical insertion of authors' names, and I think this book will find a ready place on the shelves of many departments of anaesthesia.

K.M. LEIGHTON

SCIENTIFIC FOUNDATIONS OF ANAESTHESIA (3rd Edition). C. SCURR and S. FELDMAN. London, William Heinemann Medical Books Ltd., 1982. Price £39.50

THIS TEXT HAS undergone a second revision since it first appeared in 1970, in the capable hands of the original editors. The original purpose of this text was to present in depth the current state of knowledge of the sciences from which the practice of anaesthesia and resuscitation is derived. No consideration has been given to technical aspects of practice. Extensive revision, deletion and addition of new chapters has taken place since the last revision of 1974.

The book is divided into the natural scientific divisions of physical sciences, physiology, and apparatus, with an appendix on statistics, measurement, computers and monitoring. Each section consists of complete presentations by 52 authors of their subject of special interest. These include an excellent chapter on Electrocardiography by Cotter and Branthwaite, a clear summary of respiratory mechanics by Sykes, and

Fairley's good review of the physiology of mechanical ventilation.

This compendium of the background knowledge of applied anaesthesia is without rival for its stated purpose, and should be in the library of residents and interested practitioners. The book is well designed, the text is free from error, the references timely and sufficient, and the illustrations well done.

A.J. DUNN

THE QUALITY OF CARE IN ANESTHESIA. BETTY L. GRUNDY, M.D., and J.S. GRAVENSTEIN, M.D. Springfield, Charles C. Thomas Publisher, 1982. Price \$31.50 U.S.

THIS 250 page text is a summary of the proceedings of a workshop held in Pittsburgh, in June of 1980, and appears two years later. The book describes the present state of knowledge about reviewing quality of care in anaesthesia, based on examination of clinical records, with comparison to standards of care agreed upon by peers.

The first section includes a good presentation of the positive and negative factors introduced in anaesthetic care by residency training, and an innovative use of "Telehealth" Inter Hospital communications systems, to supply consultation and triage from referral centers to community hospitals without specialist anaesthetists.

The second section is of most interest to clinical anaesthetists, describing the process of anaesthetic care. This section includes a chapter on decision-making in the operating room, by Bendixen and Duberman, and an excellent review by Cooper *et al.*, on human error in anaesthetic management. This work, a survey of critical incidents during surgery, will be familiar to most anaesthetists.

The third section, on outcome of anaesthetic care, examines statistical approaches to evaluation of care, and the cost-effectiveness of technology.

The final section discusses manpower in contexts of nurse anaesthetists, and physician anaesthetists, and the role of the regulatory bodies in the U.S.A. on quality of care. This text is a good source of discussion material for those with an interest in promoting good standards, but is limited for Canadian readers in being restricted to experience in the U.S.A.

A.J. DUNN

A SYNOPSIS OF ANAESTHESIA. R.S. ATKINSON, G. B. RUSHMAN and J.A. LEE. Bristol, Wright. PSG, 9th Edition, 1982. Price: £16.50

THERE MUST indeed be few students of anaesthesia who at one time or another have not consulted "A Synopsis of Anaesthesia" and even fewer who have not had occasion to peruse this book while preparing for examinations. It is likely the most widely read book in the entire realm of anaesthetic literature. This new 9th edition follows closely in the footsteps of its predecessors in general concept. If one compares the chapter index of this edition with its immediate predecessor one is impressed by the similarity of outline of the chapters with the exception of regional analgesia and intensive therapy, which have been removed and collated in separate distinctive sections. Despite these similarities, the contents of all chapters have been thoroughly revised and brought up-to-date, thus maintaining the general usefulness of the book as one of reference and pre-examination "cramming." One interesting innovation is the introduction of a dictionary of rare diseases with problems for

the anaesthetist extending over 12 pages, an extremely useful addition. Another change is that references, quite apart from having been brought up-to-date, are no longer given as footnotes on the appropriate pages, but are collected at the end of each chapter. Despite the enormous increase in knowledge in anaesthesia and related fields, the authors have actually achieved a slight reduction in the number of pages of the text from 928 to 898 and the thickness of the volume itself has been reduced by approximately one-third. This has been achieved by using a slightly smaller type of print and considerably thinner paper. No longer is the book hard-bound, but now has a soft cover. For a volume which is so much in demand and so heavily used, this edition just is not sturdy enough both in terms of paper and binding to withstand the very heavy use to which it is so rightfully subjected.

This edition, like its predecessors, will find a wide audience and one anticipates an early reprinting if for no other reason than that libraries will have to be replaced over and over again.

GORDON M. WYANT