Book Reviews

Critical Care Medicine. Perioperative Management

M.J. Murray, D.B. Coursin, R.G. Pearl, D.S. Prough (Eds.). Lippincott-Raven Publishers, Philadelphia, 1997. 815 pages. \$125.00 (US). ISBN 0-397-51689-4.

This text is the premier edition of a general critical care medicine textbook under the sponsorship of the American Society of Critical Care Anesthesiologists. This text is an integrated approach to the fundamentals of critical care as well as perioperative events. The organizational format of: Definition Pathophysiology/Description, Clinical/Literature Details, Relevance, Treatment, Summary, and Eye To the Future is always pulled together in a highlighted box entitled Key Points. This approach means that the text itself can be readily scanned or read for the relevant information and for the clinical pearls which are a joy to find in such a book.

The "nuts and bolts" of this text include a general introduction to the history of the development of Critical Care Medicine in the United States and a refinement of the body systems approach to topic sections. These sections include: I. Perioperative Assessment and ICU Organization, II. Perioperative Interventions and Pathophysiology, III. Neurologic Critical Care, IV. Cardiovascular Critical Care, V. Pulmonary Critical Care, VI. Gastrointestinal Critical Care, VII. Renal Critical Care, VIII. Hematological Critical Care, IX. Infection and Immunology, X. Specialized Perioperative Care

The spectrum of coverage is well done with Section X tidying up by including relevant items such as endocrine, obstetrical, pediatric, multiple trauma, burn, and poison care. The general tone and organization of the book makes it particularly suited to all anesthesiologists as we all have a more intimate familiarity with such things as muscle relaxant use and advanced pain therapy techniques than other specialists who may wish to use this book. An adequate expansion in these areas, for example, could lead to a much larger and possibly unwieldy text.

This text does fulfil its goal of providing the information needed to "update trainees and practitioners about the unique needs of the patient who may become critically ill perioperatively or the patient with established severe pathology who may require surgical intervention or specialized treatment".

The text is highly recommended to all involved with critical care medicine. It should be in all Department Libraries as an excellent source for all residents and clinicians. This reviewer also looks forward to a CD-ROM version of this text.

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Anesthesia for Aortic Surgery

Joseph I. Simpson (Ed.). Butterworth-Heinemann, 1997. 394 pages. \$95.00 (US). ISBN 0-7506-9578-1

This book was written as a compilation of the relevant information for the practice of anaesthesia for all types of aortic surgery. It is divided conceptually into three sections. It is a multi-authored book, however, the format of most chapters is uniform. The majority of the authors are not well published in the cardiovascular anaesthesia literature. This text is strictly for aortic surgery, and there is no information on carotid artery or other peripheral arterial surgery and anaesthesia.

The first section is comprised of the first five chapters which cover introductory topics such as Anatomy and Pathology, Monitoring for Aortic Surgery, Preoperative Evaluation of the Patient with Aortic Disease, etc. It provides the reader with background information on pathophysiology and anatomy. It also includes the rationale and recommendations for preoperative evaluation. The discussion on preoperative evaluation does not completely cover all current published recommendations and opinions, the notable exception being the ACC/AHA Task Force Report: Guidelines for Perioperative Cardiovascular Evaluation for Noncardiac Surgery, published in 1996.¹ However, the opinions and recommendations presented by the author are consistent with the published guidelines. The information presented on anatomy and pathophysiology is well written and very easy to understand.

The second section comprises the anaesthetic management by region of aorta, i.e. Anaesthesia for Descending Thoracic Aortic Surgery. The background information presented at the beginning of each chapter is well written and easy to assimilate. However, the discussions on anaesthetic management are not uniformly written. Perhaps more information should have been presented with respect to anaesthesia management. In particular, the question of regional versus

general anaesthesia for major vascular surgery warrants more discussion.

The third section deals with the postoperative care of the patient undergoing aortic surgery. This section is well written and detailed. The discussion on use of regional anaesthesia for postoperative analgesia is particularly well presented.

This book would be most useful for junior trainees and nursing staff specializing in cardiovascular postoperative care. Although not uniformly written, it does present a simple, cohesive approach to anaesthesia for aortic surgery. I would not recommend this text as the primary reference for anaesthetists seeking in-depth discussions or anaesthesia for aortic surgery.

1 *Circulation* 1996; 93: 1278–317.

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Handbook of Critical Care, 2nd ed.

Robert R. Kirby, Robert W. Taylor, Joseph M. Civetta (Eds.). Lippincott-Raven, 1997. 940 pages. \$45.00 (US). ISBN 0-397-51597-9

This book is intended as a portable, abridged companion to the more extensive "Critical Care" 3rd edition by the same editors. It is not intended to be an extensive treatise of critical care medicine. The editors clearly state this in the preface and, for the most part, achieve this objective. The book is divided into 11 sections covering a diverse variety of topics which are all pertinent aspects of critical care medicine. Each section contains a number of chapters relevant to the section title. While some of the chapters are particularly small, they all provide the reader with a brief overview of the topic. At the beginning of each chapter the reader is provided with a reference source for a more detailed discussion of the topic. This reference is the 3rd edition of "Critical Care" by the same editors. There are sporadic other references throughout the text. The majority of the chapters are well written synopses of information. There is some disparity with respect to detail and content in some chapters. The chapter on airway management could be expanded to include more discussion of the indications, contraindications and rationale concerning the use of pharmacological agents to facilitate tracheal intubation. The chapters on cardiogenic shock and shock could likewise be expanded to include a short discussion of use of inotropes and vasodilators for treatment of shock (of any kind). The chapter on ECMO, by comparison, is written in substantially more detail.

Topics notably absent in this handbook include the procedure for temporary pacemaker insertion in the section on "Techniques and Procedures," use of patient controlled analgesia in the chapter on pain and the indicators for the use of amiodarone in the chapter on arrhythmias.

Despite these criticisms, this would be a useful pocket manual for housestaff and trainees in whom a portion of their training will include a rotation in the critical care unit.

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Critical Care Medicine. The Essentials, 2nd ed.

John J. Marini, Arthur P. Wheeler. Williams & Wilkins, 1997. 640 pages. ISBN 0683-05555-0

Marini and Wheeler are academic intensivists whose goal was to encourage understanding of both the pathophysiology of critical illness and the key principles of management. They did not intend to produce a comprehensive review of all aspects of critical care.

The strength of their 600 page soft cover book is the first section titled: Techniques and Methods in Critical Care. This section could be required reading for residents facing a six to eight week rotation in an academic intensive care unit. Chapters on haemodynamics, monitoring, and support of the failing circulation review the relevant cardiovascular physiology and include details such as venous return curves and the "j" point of the wedge pressure tracing that are usually not covered in basic texts. The chapters on respiratory physiology and mechanical ventilation are detailed and informative. John Marini is an acknowledged expert on mechanical ventilation and has provided a state of the art review of the subject. This section may be better than comparable sections in major textbooks of anaesthesia, and could serve as a useful study resource for anaesthesia residents. The chapter on respiratory monitoring is particularly strong. Many basic texts just mention auto-PEEP; this one discusses five methods of auto-PEEP measurement.

The remaining two sections of the book are titled Medical Crisis and Surgical Crisis. These sections review selected important problems in critical care medicine. In general medical issues are covered in better detail than are surgical issues. Chapters on venous thrombosis and the sepsis syndrome are excellent. Chapters on trauma are not as complete. The section on head and spine trauma was a disappointment. The pathophysiology discussion is limited and there is no mention of Brain Trauma Foundation Guidelines for

the management of severe head injury. The section on thoracic trauma was also disappointing. Intercostal blocks are suggested for management of flail chest, and no references in this chapter were more recent than 1989.

The book is attractive and integrates tables and figures in a useful manner. It is well written and edited and I noticed only a few typographic errors. References are not provided in the text for all statements, but are provided at the end of a chapter. In general this works well as the relevant literature in controversial areas such as supranormal goals for resuscitation, gastric tonometry, and pressure targeted ventilation for ARDS is appropriately cited.

This affordable text would be useful to residents doing their first rotation in intensive care units. It is not complete enough to be the only text for critical care residents, but the physiology and pathophysiology discussed are relevant to advanced trainees. Anaesthetists who do not work in intensive care units would likely find useful information in this text to update their knowledge.

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Proceedings of the 8th World Congress on Pain

Troels S. Jensen, Judith A. Turner, Zsuzsanna Wiesenfeld-Hallin (Eds.). Progress in Pain Research and Management, Vol. 8. IASP Press, 1997. 965 pages. \$75.00 IASP members \$48.75 (US). ISBN 0-931092-18-3

The 8th World Congress on Pain was held in Vancouver during August 1996 at which there were 4,200 participants and over 1,500 presentations. The Proceedings are a selection of these presentations and includes reports of the twenty-five plenary sessions. There are fifteen major sections and sixty-five chapters that review current information on issues for society, the origins and neurobiology of chronic pain, pharmacology, quantitative measures, musculoskeletal, neuropathic and cancer pain, and pain in children and in the elderly. There have been dramatic advances during the last decade in our understanding of the basic mechanisms and treatment of pain, yet specialist training programmes barely satisfy the current demand for expert clinicians and positions for young investigators are at a premium. The Proceedings, the second under the mantle of the International Association for the Study of Pain (IASP), has maintained the edict of the IASP to

"provide its members with up-to-date, well written and inexpensive textbooks on pain", but also reflects the growing debate around the world on the use of opioids in chronic nonmalignant pain, and the rapidly developing field of neuroreceptor agonist and antagonist drugs.

There is much that can be said in praise of the Proceedings, and I can strongly recommend it to anyone working in the pain field. On the other hand, several important topics are notably absent or are dealt with very briefly. For example, postoperative pain, the new disciplines of informatics and evidence-based medicine, systematic reviews and meta-analysis, and clinical trial methodology receive hardly a mention or none at all. Other major large-scale clinical problems, such as fibromyalgia (briefly dealt with as treatment seeking behaviour, and the role of fear), migraine (not mentioned), and arthritis (dealt with very briefly as a complication of AIDS) surely should have been addressed more fully.

Two presentations by young Canadian investigators, Joel Katz on perioperative predictors of long-term pain following surgery, and Terence Coderre on the role of ionotropic and metabotropic glutamate receptors in persistent pain (Patrick D. Wall Young Investigator Award) provide new insights into the process of neuroplasticity that may help to explain the development of chronicity. The study of pain continues to evolve much as it was envisioned by the late Dr. John Bonica in whose memory the 8th World Congress on Pain was dedicated, and compared with the quite slim volume reporting the 1st Congress, these Proceedings are voluminous by comparison.

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