
The field of neuroanesthesia is known to evoke many feelings in anesthesia providers because of its uniqueness and complexity. Recent growth in neurosurgery, neurovascular surgery, neuroradiology, and spine surgery make neuroanesthesia an exciting and rewarding field for experienced providers. Nevertheless, for most anesthesia students like me, neuroanesthesia awakens great anxiety and fear. Advancements over the last several decades have made this such a specialized field, one which requires the anesthesia provider to possess a thorough understanding and knowledge base of neurophysiology, pharmacology, and new management techniques.

This comprehensive manual is a great reference tool for the education and training of anesthesiologists, anesthetists, as well as neurointensivists and neurologists. Now in its fourth edition, the handbook contains contributions from 47 physicians and allied healthcare professionals from the United States, Canada, France, Switzerland, Japan, Italy, and Singapore. It is designed for practitioners across the learning spectrum who are involved in the perioperative management of neurosurgical patients. This paperback resource is cleverly arranged in outline format, allowing for quick and easy reference. Despite the compact size of the handbook, a plethora of information is included. In its new edition, the book contains new material in interventional neuroradiology, awake craniotomy for tumor and epilepsy, pediatric neurosurgery, and anesthetic management of organ harvest, to name a few.

The book is divided into 3 sections with 22 chapters. The first section contains 5 chapters devoted to general considerations in the care of neurosurgery patients. A major strength of the handbook lies in its detailed chapter on brain and spinal cord physiology. Neurophysiology is explained at the cellular and molecular level, accompanied by illustrations and graphs for visual enhancement. Feature elements in this section include the citric acid cycle, neuronal metabolism, motor evoked potentials, transcranial doppler sonography, bispectral analysis, and neuroaxial anesthetic techniques.

Section 2 focuses on anesthetic management of neurosurgical patients. It provides invaluable information on the anesthesia care of different neurosurgical populations such as head trauma, intracranial aneurysms, neuroendocrine tumors, and pediatric and pregnant patients. Suggestive readings conclude each chapter. The extensive references testify to the quality of this book, many of which include research publications within the last 5 years. Section 3, entitled Postanesthesia Care Unit and Intensive Care, sheds light on the management of patients in the postoperative period. This section provides discussions on respiratory care and cardiovascular therapy, fluid management and nutritional support in the critically ill patient. The section concludes with clinical criteria for diagnosis of brain death and anesthetic management of organ harvest.

The amount of information contained in this deceptively small manual is impressive. The quantity of information takes a bit away from its readability but with the quality offered here, I definitely rank it in the top “must have” handbooks to own as an anesthesia student. The outline format and bolded subject headings allow for easy browsing of the pages. The use of tables, diagrams and summary boxes aid in easy recollection of the material read. And although some may question the practical use of this comprehensive text in the clinical setting, the surplus of details proves this to be a timeless reference. This handbook will indeed be a great resource and educational tool for anesthesia students as well as for experienced anesthesia providers.

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Not often do I go outside of the vast readings in the anesthesia annals to add to my “must have” books. I’ve collected enough over time, and over the years, that serve me well once I purchase the newest edition. The ICU Book, by Paul L. Marino, is one more “must have” book.
This authoritative guide is written from the perspective of the author and keeps to the aim of giving his view of this practice area understanding that there may be omissions of content, bias, and other limitations. Given these concerns, this is an easy to read, well-presented, handy reference for any clinician. After a brief preface and a few personal acknowledgements, the book is divided into 17 Sections containing 53 clinical chapters, 3 appendices chapters, and a very thorough index. Beginning with a review of the Basic Sciences, the author meticulously maneuvers through Preventive Practices, Vascular Flow and Access, Hemodynamic Monitoring, Metabolic and Regulatory Disorders, and Pharmaceutical Toxins and Antidotes.

Practitioners and patients often take for granted that once someone has learned the standard units of conversion and basic reference ranges, they’ve learned it forever. Well, as I reflect back a bit, not so…thanks for the index from those of us that just can’t remember everything. Beginning with the first appendix chapter, the metric and Anglo-Saxon systems of unit measurements (centimeter, gram, and foot, pound) display the 1960 revised metric unit measurement, called the Système International (SI) units in a compact matrix-like layout for ease of reading. Appendix 2 displays the more common (and not so common) clinical reference ranges for selected clinical laboratory tests shown as substance measured, type of fluid (plasma, urine, etc), traditional unit measurements, the conversion factor $k$ (kilo = $10^3$) and subsequent SI unit results. Add to this, vitamins and trace element reference ranges and laboratory measurements that may be influenced by body position, along with the percentage change that can be expected when moving from the upright position. The final appendix explains the development of selected clinical scoring systems. Acute Physiology and Chronic Health Evaluation (APACHE) systems I, II, and III are examined, and provisions for generating scores to predict mortality in individual intensive care unit (ICU) patients is explained along with their components. Sequential Organ Failure Assessment (SOAR) scores, Richmond Agitation Sedation Scale (RASS), and the Confusion Assessment Method for the ICU (CAM-ICU) are all very useful for anesthesia practitioners (especially as instruments of measurement for research) as baseline guidance to maintain continuity of care among caregivers.

Overall, The ICU Book is logically presented, compact, and thorough. I cannot recommend this book highly enough. For any practitioner having to face critically ill patients for any reason during the course of his or her practice, this book will prove invaluable. While some may disagree, I would venture to say that a critical analysis of this book would have every member of the anesthesia community, from student to dean, more prepared to better serve their patient. I will always have it readily available for my students and will encourage its use throughout their careers.

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