

ters are comprehensive but concise, and the recommendations are, in general, excellent summaries with valid suggestions.

There are several key changes present in this second edition. As expected, the necessary updates from changes in literature are present, e.g., the elimination of rapacuronium and the mention of the potential role of sugammadex in the summary of the evidence-based approach to choice of muscle relaxant. Some chapters have been entirely eliminated, such as "Should Succinylcholine Be Used in Children?" Other chapters have been eliminated but their content placed within another chapter, e.g., "Is There a Difference in Perioperative Morbidity and Mortality in Patients Undergoing Carotid Endarterectomy with Local *versus* General Anesthesia?" has been addressed in the chapter "What Are the Risk Factors for Perioperative Stroke?"

The book likewise has more than 20 new chapters, introducing many relevant debates in anesthesiology, such as "How Long Should You Wait after Percutaneous Coronary Intervention for Noncardiac Surgery?" The section having been transformed the most is Cardiovascular Anesthesia. The first edition has two chapters devoted to carotid endarterectomies, whereas the second edition appropriately focuses on more current topics in cardiac anesthesia: the evidence to support fast-tracking, and approaches to blood conservation in cardiac surgery. These changes improve the content of the first edition, making the second more current with respect to topics of controversy and debate in anesthesiology. Last, the second edition is an *Expert Consult* title and is conveniently accessible in its entirety on-line.

Resident trainees and the practicing clinicians alike will appreciate the concise but comprehensive nature of each chapter and the wide variety of topics covered by the text. The book explains the basis for many of our current practices and which of our practices are actually not supported by concrete evidence. It is an excellent learning tool for training clinicians and presents information in such a way that can aid the maturation from trainee to consultant in anesthesiology. Likewise, it is an outstanding text for practicing clinicians who wish to remain current over a broad span of topics, filtering through the vast body of available anesthesia literature and presenting the most relevant and valid contributions that should impact our specialty. The first edition of *Evidence-based Practice of Anesthesiology* was a landmark contribution, and the second edition maintains this standard.

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***International Anesthesiology Clinics. Critical Care: Current Challenges and Future Directions.*** Edited by Sherif Afifi, M.D., F.C.C.M., F.C.C.P., Hagerstown, Maryland, Lippincott Williams & Wilkins, 2009. Pages: 173. Price: annual subscription rate (individual), \$331.00; single copy rate, \$149.00.

As a critical care practitioner, I am always looking for a resource that can give me that quick yearly update and review but also leave me satisfied at the end, without that guilty feeling that I just read the "Cliff Notes" of critical care. Finding such a review in *International Anesthesiology Clinics* was a pleasant and refreshing surprise. Dr. Afifi, the volume's editor, chose the subject matter well and was not afraid to incorporate controversial areas within our discipline, such as renal replacement therapy, Acute Spinal Cord Injury, corticosteroids, glucose control, and the emerging area of telemedicine-Intensive Care Unit (ICU). Important areas that should be covered in a year-in-review

course (and if I could design one) are also included in this volume and complete this concise annual review of critical care: cardiopulmonary resuscitation and advanced cardiac life support, trauma, sepsis, adult respiratory distress syndrome, and nutrition (evidence-based).

Edited by Dr. Afifi, Division Chief of Anesthesiology and Critical Care at Northwestern University, and his department was well represented in the Contributing Authors section. As were other academic institutions, including the University of Florida (Tampa), Yale University, the Cleveland Clinic, and the University of Kentucky. The target audience for this resource is mentioned in the preface as "all who are involved in the care of the critically ill patients." Agreeably, I believe they hit their mark with this resource.

The cardiopulmonary resuscitation section was a good way to ease into subject matter deserving of an annual review. It seems that how we used to treat a patient in cardiac arrest may sometimes produce worse outcomes, as new evidence-based studies become available. A recent example of our unintentional harmful practice is hyperventilation with long compression breaks while checking for a rhythm (and allowing the intern to gain central access). This is illustrated nicely with a concise reiteration of the updates. This chapter ends with discussion of hypothermia after cardiac arrest and rapid response teams.

The section renal replacement therapy is concise but packed full of information that includes epidemiology of acute kidney injury and the Risk, Injury, Failure, Loss and End-stage kidney disease classification defining three grades of severity and two outcome classes. The chapter then gives a nice synopsis of the various modalities of renal replacement therapy that have been used. This chapter appropriately ends with a discussion of timing and prognosis.

The Trauma chapter is not just a rehash of Advanced Trauma Life Support. Along with a discussion of epidemiology and the initial assessment of trauma patients, the discussion highlights important, new areas in the treatment of trauma patients. Resuscitation, including a discussion of factor VIIa, Damage Control, End Points of Resuscitation, management of Closed Head Injury, Abdominal Compartment Syndrome, and management of Complex Pelvic Fractures round out this high-yield chapter.

The "Acute Spinal Cord Injury" chapter begins with the appropriate classification and initial resuscitation, and fortunately the authors are not afraid to discuss controversial pharmacologic management strategies, including corticosteroids, gangliosides, and opioid antagonists. A distinct section on Functional Electrical Stimulation is also presented. Hypothermia, ventilatory support, and hemodynamic management are also presented in a separate Intensive Care section. The available evidence for surgical decompression is also presented concisely.

The corticosteroid section is an excellent review and presents the controversies associated with diagnosis and treatment. It is a well-written chapter and all-encompassing, but I did not see mention of the corticosteroid therapy of septic shock study group<sup>2</sup> study, which has thrown a wrench into the bottle of hydrocortisone over the past year. Perhaps this chapter was submitted before the release. Fortunately, it is mentioned in the "Management of Sepsis" section (the chapter just before). And I appreciated the important table from the *Goodman & Gilman* text<sup>1</sup> that shows the various potencies of the different steroid compounds.

The "Adult Respiratory Distress Syndrome" chapter presents the proverbial protective lung strategy, and it also mentions the recent trials with high positive end-expiratory pressure and fluid management. Pharmacologic management is presented at the end of the chapter, along with the discussion of inhaled nitric oxide (which is also discussed in the subsequent Pulmonary Hypertension and Right Ventricular Function chapter). There is also a discussion that presents the available evidence for the administration and timing of steroids and surfactant in this ICU-centric disease.

The nutrition chapter is an excellent review for those needing to take the written board examination, because it describes the Harris-Benedict equation, timing of nutrition, and disease-specific formula-

tions of support (which is big business). With my practice population, I found it helpful that a separate discussion on nutritional support of the Morbidly Obese ICU patient was included, because this is not a patient demographic that will be going away soon.

This review ends with a description of telemedicine-ICU. Admittedly, this is an area of critical care with which I have had no interaction in my practice. I have had trouble envisioning the process of care in this environment. But I then read with interest the "Case" section, which was a sort of day in the life of an electronic-ICU physician. The description of a telemedicine-ICU patient interaction was eye-opening to say the least. The financial evidence that permits the continued dissemination of this new paradigm of critical care medicine is compelling. Organizational issues and barriers to implementation appropriately end the chapter.

I do recommend this review. Overall, it is concise and hits the important subject matter as could be presented at an annual review course for current practitioners (Aspen, Colorado, sounds like a nice venue for this one). Many of the chapters could also be helpful for a fellow in training and could be used as updated supplemental material just before the board examination. Unfortunately, I wasn't able to read this one at altitude after a fresh snowfall, but reading it comfortably on my porch with the sun and summertime air wasn't all that bad either.

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**Oxygen.** By Carol Cassella, M.D., New York, Simon & Schuster, 2008. Pages: 288. Price: \$15.00.

The great doctor and the great writer are equally defined by the same faculty: the sympathetic imagination. Without this, the doctor cannot inspire the confidence of the patient, so essential to a successful diagnosis and treatment. Similarly, the unsympathetic author will never succeed in creating well-rounded and believable characters, or forging the necessary connection with her readers. It is this imagination that creates and saves the lives that we cherish the most. Fortunately for us,

Carol Cassella's sympathetic imagination shines through her writing, and its product is her immensely successful first novel: *Oxygen*.

This book brings readers into the world of Dr. Marie Heaton, who, like the author in real life, is an anesthesiologist. Her routine is launched into chaos after a young girl dies on her operating table from unknown complications. From this moment on, the narrative follows the arc of a Kafkaesque nightmare as one horrific and unresolvable event propels another. On top of her personal turmoil, Dr. Heaton is soon faced with a malpractice suit that becomes more and more serious as the facts of the case begin to reveal themselves. Yet there is more: a vein of intimate troubles runs through the novel as she must deal with an estranged and aging father, an old love returned, the feeling of anonymity engendered by her profession, and the debilitating loss of confidence that follows the death of a child at her hands.

The course of events in *Oxygen* is certainly not unheard of in the medical world; many physicians can attest to the shock and personal struggle of malpractice suits from personal experiences. Doctors are often vilified in the mass media—and, therefore, in the public consciousness—as cash-hungry businessmen whose greed leads to disastrous neglect. *Oxygen*, however, paints a very different portrait of the accused: a confused and guilt-ridden individual who is, above all, a human being—and a highly moral one at that. Yet Cassella's book is far from a self-congratulatory glorification of the medical profession. Instead, she takes aim at the bureaucracy of the healthcare and malpractice systems, both of which attempt to remove the humanity from dire situations that are all too human.

Yet *Oxygen* is not only directed at those who harbor hesitations toward the medical community. Perhaps the best possible reader of this novel would in fact be a fellow anesthesiologist. There is great humor in Cassella's characterization of various doctors, each of whom conform to knowable "types" (the smugly self-assured surgeon, the thrill seeker, the naively overconfident resident) without settling into clichés. But much more important is the sense of community engendered by this novel. At the core of the work is the search for redemption: how, or even if, the self can again be secured after the terrible accidents that invariably occur in the medical world. As *Oxygen* attests, a malpractice suit is an alienating thing, for one must fear not only the loss of faith in oneself, but also the loss of faith of one's colleagues, friends, and family. While neither unrealistically optimistic nor sadistically dark, Cassella's brilliant novel provides a voice of comfort for those who have been or will be involved in a malpractice suit at some point in their lives. *Oxygen* may not have all the answers, but it does let us know that, despite all appearances, we are not alone.

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