

Michael J. Avram, Ph.D., Editor

Anesthesia and Addiction, International Anesthesiology Clinics 49 (1), Winter 2011. By Ethan O. Bryson, M.D., and Elizabeth A. M. Frost, M.D. Philadelphia, Lippincott Williams & Wilkins, 2011. Pages: 176. Price: \$176.00.

The successful treatment of substance abuse has been challenging addiction medicine specialists for years, while the spectrum of illicit drugs has been increasing. The prevalence of alcoholism or drug addiction is vast, so that most people personally know someone with the disease or have experienced it themselves. Alcoholics and drug addicts commonly present to surgery, sometimes acutely intoxicated, posing a particular challenge to anesthesia clinicians. In addition, anesthesiologists and nurse anesthetists are themselves at risk for becoming addicted to the same medications they administer to patients; a wide path of personal destruction or death can occur unless a recovery program is offered in time.

Anesthesia and Addiction enhances and clarifies current knowledge in this rapidly changing field. The book begins with a chapter on the genetic and cellular mechanisms of addiction, effectively leading to the next chapter on management of substance abuse in the hospital setting. The integration of the scientific basis of addiction and its clinical management is a strength of the presentation throughout the book.

From chapters on anesthetic implications of alcoholism and illicit opioid abuse to chapters on cocaine and the club drugs as well as marijuana and other inhaled toxins, the book covers a wide range of abused substances. Eye-opening statistics are given for each drug of abuse. Pathophysiology and organ dysfunction are detailed, laying the foundation for anesthetic considerations.

Other chapters address specialized topics such as anesthesia for opioid detoxification and drug and alcohol use during pregnancy. Drug abuse in the patient with chronic pain and perioperative implications of buprenorphine maintenance treatment are additional chapter topics. Controversial areas of management are presented thoughtfully and handled fairly. Finally, "The Drug-Seeking Anesthesia Care Provider" chapter sheds new light on the scope of this underestimated problem, which may have an undetected incidence of diversion reaching 8–9%, according to survey data presented in the book. My opinion is that typical signs and symptoms may be inadequate to identify many addicts. Perhaps the focus should be shifted to consulting recovering addicts, who may be willing to identify methods used to divert the drug along with associated in-hospital behaviors.

Anesthesia and Addiction is concise and informative, clearly dividing the material into labeled categories. The

book strikes the right balance between being comprehensive yet succinct. Each chapter is supported by helpful tables and an extensive list of references.

As a pioneer textbook of its kind, *Anesthesia and Addiction* sets a high standard for future endeavors. It is relevant reading for all anesthesia clinicians, whether experienced or in-training. The topics covered are undoubtedly encountered in clinical practice.

Furthermore, institutions could also use the material to formulate diversion prevention programs, a safety initiative to protect our own.

James J. Rowe, M.D., Sanford Bemidji Medical Center, Bemidji, Minnesota. rowe77@earthlink.net

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Case Studies in Neuroanesthesia and Neurocritical Care. Edited by George A. Mashour, M.D., Ph.D., and Ehab Farag, M.D. New York, Cambridge University Press, 2011. Pages: 360. Price: \$90.00.

Few texts endeavor to specify the perioperative concerns for various procedures and disease states on a case-by-case basis across the breadth of a subspecialty. Fewer still manage to do so while systematically addressing the fundamentals one must understand to appreciate that subspecialty. The unique success of *Case Studies in Neuroanesthesia and Neurocritical Care* lies in its thoughtful, logical progression through the basics of neuroanesthetic care by way of an interesting and very readable series of clinical vignettes.

Well-suited for trainees, *Case Studies* provides both an overview of subspecialty neuroanesthetic practice and a handy reference for whichever specific cases one might encounter on a given day. From intracranial vascular procedures and major spine cases to functional neurosurgery and carotid endarterectomy, the learner in neuroanesthesia will find both a preview of what a prototypical case entails and a description of common critical events and concerns in the first half of this text. Special attention is given to preoperative assessment and postoperative complications for each class of procedure. Pediatric neuroanesthesia receives its own separate section, as does the discussion of an assortment of neurologic sequelae in other patient populations (including pregnancy, liver failure, and nonneurosurgical procedures).

The second half of the text is given over to discussion of the intensive care of the neurosurgical patient. Topics covered include basics of the intensive care unit, such as management of hypotension, mechanical ventilation, and end-of-life issues, as well as common neurosurgical problems, such as vasospasm, hyponatremia, and status epilepticus.