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Anesthesia for Genetic, Metabolic, and Dysmorphic Syndromes of Childhood, 2nd Edition. By Victor C. Baum, M.D., and Jennifer E. O'Flaherty, M.D., M.P.H. Philadelphia, Lippincott, Williams & Wilkins, 2007. Pages: 415. Price: \$149.00.

In this second edition of *Anesthesia for Genetic, Metabolic and Dysmorphic Syndromes of Childhood*, Baum and O'Flaherty have once again made available to their anesthesiology colleagues worldwide a broad review of rare disorders, therefore preserving the essence of the first edition while refreshing previous phenotypic descriptions with an evolving genomically based approach. The authors, pediatricians as well as anesthesiologists, convey both specialties well, and the result is a smoothly written and stylistically consistent reference of increasing importance, as many of these patients with rare syndromes now survive longer than ever before.

The authors' foreword notes, *pari passu*, that this is an unindexed book, basically listing numerically and alphabetically the syndromes it covers. As justification they inveigle, quite reasonably, that the purpose of the book is not to enable anesthesiologists to make genetic diagnoses but rather, with the diagnosis recognized preoperatively, to adequately appreciate the syndromic implications to formulate anesthetic management based on existing clinical skills and judgment. This is just what any clinician would wish from a medical consultant!

A glossary of typical Classic language-derived terms (*cubitus varus*, *cutis marmorata*, *pes cavus*, among others) is mercifully placed before the content. The consistency of the template approach is praiseworthy for ease of use and uniformity. The template is organized by system, with anesthetic considerations following. Each numbered or named syndrome is referenced by number to (McKusick's) Mendelian Inheritance in Man, the bible of syndromic and dysmorphic disorders.¹ Like hidden treasures, there are often amusing historical pearls in the miscellaneous subsections. For example, under Leber Congenital Amaurosis: "Theodor Leber pronounced his name 'Layber' and was the founder of scientific ophthalmology. He had wanted to be a chemist, but was told by Professor Bunsen that there were already too many chemists, so he chose medicine as an alternative." The Medieval legend of Ondine is related in the section on Ondine's Curse. There are many such delightful and illuminating diversions embedded within the text. For those who deal with syndromic patients frequently at tertiary or quaternary care pediatric centers, this template organization subtly trains clinicians in a consistent approach to complicated, and sometimes intimidating, disorders. Illustrations are not overdone but are very helpful when shown. At the end of the Z's, several pages of beloved intermediary metabolic pathways (steroid biosynthesis, tyrosine metabolism, the simplified urea cycle, metabolism of branched chain amino acids, glycogen metabolism, and the porphyrias) are illustrated, along with various pathway impairments resulting in disease states along the way.

Cross-references are readily provided for syndromes with multiple names. Although the authors are unapologetic about the lack of an index, it may take a bit longer to navigate specifically to a disorder unless you know exactly what you are looking for; in most circumstances, practicing anesthesiologists will, because most of these patients already have a diagnosis by the time we see them. References are intriguingly listed in reverse chronological order rather than by appearance in the text of the section. This novel approach serves the curious reader well in culling additional, more recent information.

Is this book too limited for the practicing anesthesiologist? This view is too myopic. Many patients who would never have survived beyond the first several months to years of life are surviving into adulthood. Many patients who would have been cognitively and/or physically impaired are now competent and independently functioning adults. They have unique as well as general health and surgical problems and,

as with our successes in pediatric surgery and critical care, will visit us in the operating room for many years. For these reasons, this compendium of relatively rare disorders and their anesthetic implications, lucidly written, superbly organized and laden with sound advice and islands of history and delightful commentary about these disorders, should be readily available to all practitioners of anesthesia. Moreover, it holds substantial importance for all who may care for syndromic patients in an acute setting such as emergency medicine, interventional specialties such as cardiology or radiology, surgeons, and intensivists. Geneticists and dysmorphologists who are consultants to anesthesiologists will also be interested in this book for the mirror-image insight it will impart.

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Reference

1. McKusick VA. Mendelian Inheritance in Man. Baltimore, The Johns Hopkins University Press, 1978

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Atlas of Airway Management: Techniques and Tools. By Steven L. Orebaugh, M.D. Philadelphia, Lippincott Williams & Wilkins, 2006. Pages: 224. Price: \$79.95.

Anesthesiologists rightly consider themselves the ultimate airway professionals. Because many books have been published on the subject, some brief and others exhaustive, one might enquire as to the need for yet another. Enter the new reference by Steven L. Orebaugh, M.D.: *Atlas of Airway Management: Techniques and Tools*. Dr. Orebaugh, who has trained in Emergency Medicine, Critical Care, and Anesthesiology, intends this book to be an illustrative complement to previously published texts on the subject, with his intended audience those who are learning to manage airways.

The author undertakes a comprehensive discussion of airway management in a very visual manner. He includes a number of gross anatomy sketches recognizable from standard texts; a plethora of images obtained *via* laryngoscopy, bronchoscopy, and computed tomography/magnetic resonance imaging scans; those obtained in the clinical setting; and (in what is probably the major strength of the book) literally hundreds of photographs of various airway devices and techniques demonstrated on cadaveric specimens. The most educational photos are those that show a cadaver in sagittal section with various airway devices in proper position.

The book is divided into 10 parts; each part contains one to seven chapters. Part I concerns itself with the routine airway management that we do on a regular basis, including mask ventilation, direct laryngoscopy, and the devices used in this setting. Also included are brief discussions on the pediatric airway and medications used in management of the airway. Part II is a treatise on the difficult airway. A chapter on the incidence and predictors of difficult airway management precedes a number of photos and drawings demonstrating the factors that may portend a difficult airway. Decision-making in airway management is also covered, including algorithms for managing difficult airways from the perspective of both Anesthesiology and Emergency Medicine.

Parts III-X are where the book really gets interesting. Here the author discusses virtually every device and technique that exists for airway management! These sections are arranged logically, which makes for easy reference. Devices and techniques discussed include those used

for direct laryngoscopy (bougies and stylets), blind intubation strategies, lightwands and optical stylets, retrograde procedures, fiberoptic intubations (rigid and flexible), a superb section on emergency ventilation, and techniques that combine various devices (think fiberoptic scopes, laryngeal mask airways, combitubes, bougies, stylets, lightwands, and all manner of combinations of these). Finally, step-by-step photographic demonstrations of wire-guided (percutaneous) and open cricothyrotomy are presented. The latter is shown using the "poor man's cricothyrotomy set," consisting of a scalpel, hemostat, and an endotracheal tube, which can be used if a standard tray is not available. The book concludes with a complete index for quick reference.

Although the strength of this atlas is obviously the visual component, the author has also included valuable commentary along with each device or technique, which sets this book apart from others. The concept of a given device or technique is first discussed, followed by evidence from the literature as to its usage and efficacy (references are provided at the end of every chapter). Preparation for using the device or how to perform the procedure is spelled out, followed by a description of the procedure itself, which is extremely well illustrated with high-quality photographs. Each chapter concludes with bulleted lists detailing the practicality (including complexity and affordability), indications, contraindications, and complications associated with the device or technique.

Another strength of the book is its completeness. Were you ever curious (as I was) to know why that old prism is floating around in the bottom of your anesthesia cart, and how it was used? Turn to page 78 and find out. Has your attending been discussing wistfully how wonderful the Bullard laryngoscope was "back in the day," and you have no

clue what that is? Get up to speed by taking a look at Chapter 21. Is there a patient with a difficult airway rolling into your operating room? Take a quick look at Part X (Emergency Surgical Airways) for a review, just in case.

I have only a couple of minor points on which to quibble. Those who work with children on a regular basis would probably appreciate a larger section on the pediatric airway; however, to be fair, the author states this is beyond the scope of his book. In addition, an included DVD with video of the techniques discussed might be a valuable inclusion in future editions.

Although not many will sit down to read this book from start to finish, it is a fantastic reference for anyone who manages the airway for a living. Since receiving this book for review, I have been using it in my practice with medical students and beginning residents and as an adjunct to simulation training. I have seen medical students flounder with intubations, taken them aside, and shown them some choice photos in this book, then observed them succeed on the very next attempt. I am positive Dr. Orebaugh's *Atlas of Airway Management: Techniques and Tools* will thus find a ready application in the training of new practitioners. Although its primary audience is those just beginning to familiarize themselves with airway management and those who train them, it is also a valuable reference for all "ultimate airway professionals" to have nearby.

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CORRECTION

The supplemental figure that was published as part of the cover article for the August 2007 issue of the Journal (pages 202-12), which appeared as a Web site enhancement on the ANESTHESIOLOGY Web site, was incorrect. An error occurred during the construction of the illustration. The data analysis in the study and all results were derived from raw data, which were generated independently from any illustrations, and therefore are unaffected. The correct supplemental figure is now posted on the Journal Web site (www.anesthesiology.org).

Velly LJ, Rey MF, Bruder NJ, Gouvtsova FA, Witjas T, Regis JM, Peragut JC, Gouin FM: Differential dynamic of action on cortical and subcortical structures of anesthetic agents during induction of anesthesia. ANESTHESIOLOGY 2007; 107:202-12