David O. Warner, M.D., Editor

Laryngeal Mask Anesthesia: Principles and Practice, 2nd Edition. By Joseph R. Brimacombe, M.B., Ch.B., F.R.C.A., M.D. New York, Saunders, 2005. Pages: 699. Price: $125.00.

Archie Brain, M.A., F.F.A.R.C.S.I. (Honorary Consultant of Anesthesiology, Royal Berkshire Hospital, Reading, Great Britain), inventor of three distinctive types of *Laryngeal Mask Airway*™ (*LMA*™), has revolutionized airway management, especially that of the difficult airway. No other invention has had such a profound impact on the safe management of the airway and the practice of anesthesia in the past 50 yr. The introduction of the *LMA*™ in 1988 has generated tremendous interest in research in airway management, resulting in more than 4,000 publications. Because Joseph R. Brimacombe's (Professor, James Cook University, Cairns, Australia) contribution to this body of literature is significant both in quantity (more than 400 articles) and in quality, he is highly qualified to write this textbook.

Chapter 1 covers the history of the development of extraglottic airways from 1874, the *LMA*™, a biography of its inventor, and the history of the LMA Company (Bucks, United Kingdom). Dr. Brain modified the first *LMA*™ many times and, with his close associate, Chandy Verghese, M.B.B.S., D.A., F.R.C.A., (Consultant in Anesthesia and Intensive Care Medicine, Royal Berkshire Hospital, Reading, Great Britain), used the device in more than 7,000 patients before he considered it safe for general use. The number of prototypes designed and the amount of work devoted to development of the device remind me of the efforts of Thomas Edison, who worked relentlessly to complete the first functional electric bulb 120 yr ago. The *LMA*™ is unique in the history of the inventions of airway devices. Mr. Robert Gaines-Cooper (Founder and Group Chairman, LMA Company, Osprey House, Old Street, St. Helier, Jersey, Channel Islands) had the business vision and trust in Dr. Brain to invest capital in a company solely for manufacturing and distributing the *LMA*™, at the time a device with an unknown future.

Dr. Brimacombe should be congratulated for the scope of this text, which raises the bar for future clinicians and scientists who intend to write evidence-based medical textbooks.

The book consists of an introduction and 22 chapters, and has many new features not seen in most other textbooks. The introduction describes the method for literature search, review, and summary. Whenever three or more studies addressed one particular issue, they were subjected to meta-analysis before summary statements and practice guidelines were offered. Each chapter starts with an index of contents and ends with a quick reference section, a summary, and a list of the meta-analytical findings. The references for each chapter are extensive, up-to-date, and described as peer reviewed, review paper, case report, abstract, or letter with or without data. In Chapter 13, "The Difficult Airway," for example, most references include one to four lines of description about the type of study and the findings. Chapters 2 and 3 describe the family of *LMA*™ devices and accessories and the relevant pharyngeal and laryngeal anatomy. Chapter 4 reviews the pathophysiologic effects of the *LMA*™ on the body's systems. Chapters 5 and 6 review the mechanism and clinical implications of *LMAs*™. Chapters 7–10 summarize the use of the *LMA*™ for administration of anesthesia: indications and contraindications, size selection, insertion techniques, assessment of function and position, and timing of removal. The techniques applied for use of the *LMA*™ are superbly illustrated. The use of the *LMA*™ in the intensive care unit and for resuscitation is summarized in Chapters 11 and 12. Chapter 13 examines the role of the *LMA*™ in management of the difficult airway. Chapters 14–19 consider the use of the *LMA*™ in children and in surgical specialties, and the flexible, intubating, and *Pro-Seal LMAs*™. Chapter 20 discusses the educational topics related to the use of the *LMA*™. Chapter 21 reviews the complications and problems associated with the use of *LMA*™. Finally, Chapter 22 presents other extraglottic devices and compares them with the *LMA*™. The book also has three appendices listing articles that appeared after the book was submitted to the publisher. These references are grouped by their relevance to the 22 chapters of the book. The third appendix lists the names of the researchers and the number of their publications about the *LMA*™. Most of the 4,299 researchers have published 9 or fewer articles; the textbook's author has 412, more than anyone else.

Dr. Brimacombe emphasizes that the *LMA*™ is not just another airway device but rather a new approach to anesthetic management that has improved patient comfort and safety. The reader appreciates the author's own contribution to this field, his selected and modified techniques in use of these devices, and his enormous personal contribution to the subject with the experience that he has gained over past 15 yr. The information offered in this textbook is complete.

Fortunately, the shortcomings of the book are few and insignificant. Reading page 162, under the heading Nasotracheal Intubation, I got the impression that nasotracheal intubation is performed using an *LMA*™. What is described is the use of the *LMA*™ in supporting fiberoptic nasotracheal intubation. The statement that the "*LMA*™ may be the airway of choice for thyroid surgery where the trachea is grossly deviated or narrowed as it may prevent further tracheal damage" (p. 420) is not shared by this reviewer. On page 540, line 9, the word "shorter" should be "longer." Some of the endoscopic colored pictures could have been of a higher quality. These few criticisms, however, do not affect the value of the book.

Dr. Brimacombe has done a superb job in writing this textbook and has accomplished all the goals stated in the preface. This book is strongly recommended to those engaged in airway management and the practice of anesthesia. It offers rich practical and clinical information essential for safe use of the *LMA*™ and is an exceptional resource for clinicians and physician scientists interested in airway research. Dr. Brain's innovation is a gift of life to patients and anesthesiologists alike and has saved an untold number of lives since its introduction. With this book, Dr. Brimacombe makes a convincing argument for the proper use of *LMA*™ to assure patient safety and well-being. It is unfortunate that the full clinical potential of *LMA*™ is not always realized.

This book is a testimonial to Dr. Brimacombe research achievements and his clinical expertise and, as stated in the preface, a tribute to Dr. Archie Brain's legacy.

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Critical Care: A Volume in the Requisites in Anesthesiology Series. By Peter J. Papadakos, M.D., F.C.C.P., F.C.C.M., and James E. Szalados, M.D., M.B.A., M.H.A., F.C.C.P., F.C.C.M. Series Editor: Roberta L. Hines, B.A., M.D. Philadelphia, Elsevier-Mosby, 2005. Pages: 450. Price: $79.95.

I welcome the first edition of *Critical Care*, *The Requisites in Anesthesiology*, by Peter Papadakos, M.D. (Professor of Anesthesiology, Surgery and Neurosurgery, University of Rochester School of Medicine and Dentistry, Rochester, NY), and James Szalados, M.D. (Partner, Westside Anesthesia Associates of Rochester, Rochester, NY). As one who belongs to the generation of 21st-century PubMed, Google Scholar, UpToDate, Cochrane Library, and evidence-based literature searches, I was faced with a serious doubt about how to objectively review a conventional critical care textbook. Indeed, I could hardly remember the last time after the board examination that I had opened

a textbook to look up clinical information. With a measurable dose of skepticism, I browsed a few chapters of particular interest to me. To my surprise, I found it an enjoyable and entertaining after-work reading. And I learned quite a bit, too. Chapter after chapter, my interest and enthusiasm kept growing, and by the end of the first third of the text, I was happy to conclude that standard-format textbooks still deserve a prominent and unique place in medical education.

While complementing other materials in the series, this text can also serve as a stand-alone introductory reference for practice and teaching of postoperative as well as nonoperative intensive care medicine. With contributions from both anesthesiologists and other critical care experts from various disciplines, this textbook highlights the modern, intensivist-guided multidisciplinary approach in the care of critically ill or injured patients.

Although notably lacking illustrated diagrams and algorithms, the text is rich in tables, "clinical caveats," "pearls," "current controversies," and "case studies," all of which break up the dense but logical text to make for easy reading and understanding of basic and advanced concepts of intensive care medicine. To the extent it is possible in a conventional textbook format, the content of each chapter is reasonably up-to-date. The editors, Drs. Papadakos and Szalados, should be commended for stressing the importance of evidence-based practices and, throughout this textbook, emphasizing key clinical research findings that have shaped the field of critical care medicine over the past several years.

The first part, *General Principles of Intensive Care Unit*, contains diverse topics from basics of electrolyte management and hemodynamic monitoring to state of the art reviews on modern sepsis management and Stewart's acid–base approach. The second part, *Organ Systems*, includes the techniques of organ failure support, diagnosis, and management of important emergencies, all arranged by major organ systems. The third part, *Trauma and Ethics*, deals with consequences or injury and other environmental exposures as well as scoring systems and ethical, legal, and financial issues in critical care medicine. Of particular interest is a chapter describing currently hot topics of safety, quality assurance, quality improvement, and performance measures in critical care medicine. Finally, the last part, *Postanesthesia Care Unit*, describes the recognition and management of common and important problems encountered in postanesthesia care units.

In conclusion, *Critical Care*, *The Requisites in Anesthesiology*, represents a useful and important addition to critical care library. I believe that an audience of intensivists, anesthesiologists, and physician and nonphysician critical care practitioners and trainees of any background will find this book useful in everyday practice, learning, and teaching. The concise but comprehensive format of this clinical text will also make it a good companion for board examination preparations.

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