

VOLUME ONE

Principles and

Practice of

ANESTHESIOLOGY



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VOLUME ONE

Principles and Practice of

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*This book is dedicated to the fond memory of
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whose untimely death represents a loss not only to the editors of this book,
but also to the specialty of anesthesiology.*

Ben was not only an accomplished academic anesthesiologist and an expert in regional anesthesia, he was also a friend of many of the authors and readers of this book. Those of us who were fortunate enough to have spent significant time with him will miss his warm, witty, and insightful conversation. The extended family of colleagues and students who shared time with Ben as well as his own family will always remember him fondly and with respect.

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Preface

Principles and Practice of Anesthesiology is the result of many hours of discussion about how the specialty should be conceptualized and practiced. We feel that anesthesiology has matured into a complete medical discipline whose focus should be on the patient. As a result, this book is clearly patient-oriented in a manner similar to that found in textbooks of medicine, surgery, and pediatrics. There are other textbooks of anesthesiology that are complete and well written, but they focus on details (e.g., administration of drugs, mechanical procedures) rather than on the complete care of the patient. The organization of this book, however, reflects what we believe is the more current and comprehensive view of the role of the anesthesiologist as the physician responsible for sound medical judgments about surgical patients, a view more in keeping with the approach of modern anesthetic practice.

One consequence of this approach is the recognition that the specialty of anesthesiology has grown increasingly complex. The sophistication needed to perform preoperative medical evaluations, to choose from a wide range of intraoperative techniques, and to manage postoperative care (especially postoperative pain management) has increased dramatically over the past decade. In fact, anesthesiology has become a discipline with many subspecialties, and of all these, traditional anesthesia practice has expanded most in the field of regional anesthesia and pain management. Compared to just a few years ago, a much greater percentage of anesthesia is being delivered by regional and combined techniques, and the anesthesiologist is being increasingly drawn into postoperative management of pain as well as a more comprehensive pain management practice that involves patients who may never have been in the operating room. Such patients include individuals with cancer-related pain,

traumatic pain, and with similar conditions for which the anesthesiologist is now considered an expert and a consultant. Therefore we have made a conscious effort in this book to emphasize this growth by discussing regional anesthesia with expanded material (including diagrams and illustrations) and by covering pain management in depth. Sections of this book have been devoted exclusively to these subspecialties in an attempt to fully integrate these areas into a major text on anesthesiology, rather than to relegate them to separate volumes.

A major investment has also been made on the part of the editors, the authors, and the publisher of this text in recognizing that a book that aspired to such goals would have to be made much more “user-friendly” than is traditionally the case. We increasingly find a computer-literate readership is accustomed to seeing displays of information in colors and in the form of icons and creative graphs. Therefore we have tried to present the information in this book in such a way that makes it easy for the reader to understand, retain, and discuss the information. In particular, innovative diagrams have been used to describe ways to administer regional anesthesia and to provide pain relief. Beyond that, the presentation of physiologic and biochemical information is offered in ways not previously tried in textbooks of anesthesiology. It is our hope that the presentation and format of this book will make it possible for the reader to use this reference not only to read but also to prepare and present slides and other illustrative media.

Finally, we made a conscious decision to acknowledge that the field of critical care medicine itself had grown to be an enormous field with many major multiple-volume texts in its own right. Attempting to cover all of critical care medicine in a few chapters seemed inconsistent with the general principles on

which this book was formulated. Therefore we chose to emphasize and expand the coverage of regional anesthesia in the space traditionally reserved for a summary review of critical care medicine, which we believe will represent a better educational investment for the practicing anesthesiologist than a more superficial overview of both areas.

We clearly hope that these philosophic approaches to the understanding and presentation of the principles of anesthetic practice will provide our readership

with a fresh and innovative approach to the speciality. It is our goal that the *Principles and Practice of Anesthesiology* represent a new way of looking at and of presenting the dynamic nature of modern anesthetic practice.

Mark C. Rogers

John H. Tinker

David E. Longnecker

June 1992

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