REVIEWS OF EDUCATIONAL MATERIAL

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The Pharmacologic Basis of Anesthesiology. Edited by T. Andrew Bowdle, Akira Horita, and Evan D. Kharash. New York, Churchill Livingstone, 1994. Pages: 779. Price: $99.00.

Much of anesthesiology is applied pharmacology, and with no other basic science field is our specialty more closely associated. Still, there is a lack of good texts merging the two fields. As indicated in the preface, *The Pharmacologic Basis of Anesthesiology* was written because the authors believed no reference book available answered, in adequate depth, questions about the basic science, pharmacokinetics, and clinical pharmacology of anesthetic drugs. They decided to fill that gap and created an excellent text that focuses specifically on the pharmacology of the unique set of drugs that defines the specialty of anesthesiology.

The organization of this book is unconventional, yet effective. Apart from an introductory chapter on cellular neuropharmacology (which would have benefitted from more, and higher quality, figures), it contains no general pharmacology chapters. Instead, basic science is integrated with each of the sections on specific classes of drugs. Each section consists of a chapter on basic pharmacology of the drug class, one on pharmacokinetics, and one or more on clinical pharmacology and applications. This approach gives a direct clinical relevance to even the basic pharmacology sections and unites basic and practical aspects in a manner that a division of the book in "general" and "applied" sections never could. The method has some disadvantages, primarily the difficulty in finding basic pharmacology principles among the various chapters. For example, the basics of pharmacokinetics are covered in the chapter on opioids, the basic concepts of electrophysiology in the chapter on local anesthetics, and the basic concepts of receptor molecular biology in the chapter on adrenergic agents. However, this is a minor detriment.

Coverage is thorough, yet the book reads easily and maintains a clinical perspective throughout. Sections are devoted to opioids (including excellent chapters on the agonists-antagonists and on spinal opioid use); local anesthetics; intravenous induction agents, with the exception of ketamine, which (reasonably) has its own section; neuromuscular blockers and antagonists; and inhalational anesthetics. Two final sections cover anesthetic adjuvants and emerging concepts, each with an eclectic choice of topics. The section on anesthetic adjuvants includes chapters on adrenergic receptors, α_2 agonists, β antagonists, nonsteroidal antiinflammatory drugs, and antiemetics. Interestingly, there is no coverage of adrenergic agonists such as ephedrine and phenylephrine, which are commonly used by anesthesiologists. The section on emerging concepts discusses novel drug-delivery techniques, nitric oxide, and new developments in pharmacokinetics. A chapter on novel spinal drugs (α_2 adrenergics, muscarinic agonists, tricyclic antidepressants) would have been useful in this section. Overall, the text provides comprehensive coverage of most drugs in common use by anesthesia providers. The main subject lacking is basic and clinical pharmacology of chronic pain management.

As is, to some degree, unavoidable in a multiauthor text, there are overlaps and style differences, neither of which is a significant deficiency. However, a few clinically important issues, which should have been discussed, have fallen through the cracks. Some examples are the pharmacology and use of EMLA, the use of rectal methohexital in children (or intravenous methohexital for electroconvulsive therapy), as well as the effects of lidocaine on cerebral hemodynamics and its use in preventing blood pressure and intracranial pressure increases.

In general, this volume is an excellent resource, as a textbook and as a reference. The figures are clear and adequate in number, the index is complete, literature references are pertinent and current, and sufficient effort has been made to include pointers to new developments to make the book useful for a number of years in this rapidly changing field. It is recommended reading for all anesthesiologists who want to update or deepen their understanding of the drugs they use daily.

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A Philosophical Approach to Anaesthesia. By J. Schou. Lorrach, Alix Publishing Group, 1994. Pages: 104. Price: $18.00.

Idle moments are rare at an international medical meeting, especially one in Paris, France. The combination of a resolving coryza and a really nasty, rainy, cold spring day forced me to spend an extra hour or so in the scientific and technical exhibits rather than strolling the Tuileries gardens or the Champs Elysees. In the exhibit hall I found John Schou, a bearded giant of a man selling his own books. The challenge on the back cover was too much temptation for me, and I bought a copy to read on the return flight. He asks, "You call yourself an anaesthetist—do you really know what anaesthesia is?" If my answer is yes; he responds, "You know too much, read *A Philosophical Approach to Anaesthesia* and you will see how little you knew." If my answer is no and I don't care, he responds, "A difficult though widespread problem of how anaesthetists lost touch with anaesthesia." If I answer no but I am interested, he responds, "Finally a book for those who do not seek simple answers to complex questions. This book is for the stimulation of thought (but not attempting universal agreement) while opening up neglected topics of the anaesthetist's profession."

The book contains nine chapters and an epilogue in its 104 pages. It challenges our language and our science. Schou develops his iconoclastic philosophies in detail by showing that anaesthesia is not sleep (physiologic sleep); unconsciousness is not sleep. Anaesthesia has some similarities with sleep but shows important differences from natural sleep. He attempts to show that investigators (double-blind anesthetists) who believe only in therapies that have been proven in controlled clinical studies rarely will produce innovative progressive developments. Such individuals are able to follow the conventional track, blinded on one side by standards and guidelines and on the other side by the need to satisfy mathematical statistics ($2 + 2 = 3.67 \pm 0.38$, $P < 0.05$). The standard guidelines are of great comfort to the beginner in any medical specialty. Later, when the background has become clear and experience has been gathered, the standards inhibit the improvement of a practice that, in the