

## BOOK REVIEWS

Edward Lowenstein, M.D., Editor

**Clinical Transcutaneous Electrical Nerve Stimulation.** BY JEFFREY S. MANNHEIMER AND GERALD N. LAMPE. F. A. Davis Publishing Company, Philadelphia, 1984. Pages: 636. Price: \$42.00.

The authors present a theoretical review and practical guide for the use of transcutaneous electrical nerve stimulation (TENS) to modulate pain. The book is a well-researched, well-written, and well-organized information source on the role of TENS as an adjunct in the comprehensive treatment of patients in pain. Ideas and techniques are summarized whenever possible and often condensed into graphic or chart form. The information is complemented by case studies, pictures, and diagrams.

I highly recommend this excellent text for physicians who are interested in using TENS in their treatment of patients in pain.

THOMAS SALVO  
Physical Therapist  
Emerson Hospital  
Concord, Massachusetts 01742

**Pharmacokinetics of Anaesthesia.** EDITED BY CEDRIC PRYS-ROBERTS AND CARL C. HUG, JR. Oxford, Blackwell Scientific Publications, 1984. Pages: 358. Price: \$41.50.

Drs. Prys-Roberts and Hug, with the help of 14 contributing authors, have compiled a comprehensive, up-to-date review of pharmacokinetics in anesthetic practice. As the editors note in their Preface, their purpose in doing so is to help the anesthesiologist to: 1) understand dose-effect relationships; 2) recognize dispositional factors as a cause of variability in dose-response; 3) predict and optimize the effects of dosing regimens; and 4) design comparative investigations of drug potencies and efficacies. The book is composed of 15 chapters that are generally organized by class of drug. However, the first four chapters do provide a summary and review of pharmacokinetic principles, drug-receptor reactions, assay principles, and the effects of renal and hepatic disease on pharmacokinetics. These introductory chapters are written at a fairly advanced level. Although the development of principles proceeds logically, some mathematic sophistication and biochemical background are definitely helpful in understanding the presentation. It is possible that the neophyte in pharmacokinetics would be somewhat overwhelmed by the complexity and detail presented.

The remaining chapters cover the inhaled anesthetics, barbiturates, nonbarbiturate anesthetics, benzodiazepines, narcotic analgesics, ketamine, muscle relaxants and their antagonists, local anesthetics, and beta-antagonists. In addition, there are individual chapters devoted to sodium nitroprusside and drug preservatives and solvents, both of which are interesting and very informative, although having little to do with pharmacokinetics. Each chapter devoted to a class of drugs is written by an authority on the subject, in each case an anesthesiologist who has done major work in the specific area.

Particularly outstanding in this regard are the chapters on the nar-

cotic analgesics and on the barbiturates. In these chapters, the authors provide sufficient information on the compounds' pharmacodynamics (concentration-response relationships) to set the drug concentrations predicted by pharmacokinetics in proper clinical perspective. As is evident from the editors' goals in writing this book, pharmacokinetic data and concepts are simply stepping stones to understanding and optimizing the dose-effect relationship. To be useful as such, they must be presented in the context of pharmacodynamics.

This book follows closely on the heels of two other books on anesthetic pharmacokinetics: Stanski and Watkins' *Drug Disposition in Anesthesia* and Wood and Wood's *Drugs and Anesthesia*, both published in 1982. By way of comparison, the book by Stanski and Watkins is somewhat smaller in scope, covering fewer drugs in less exhaustive detail. It does, however, have the advantages of cohesiveness of approach and continuity that a multi-author text can never achieve and is probably more readable as an introduction to pharmacokinetics than the Prys-Roberts and Hug text. The text by Wood and Wood takes a broader, more general pharmacologic approach, covering a great variety of drugs and including such information as structure-activity relationships, drug interactions, and recommendations for dosing. In this context, *Pharmacokinetics of Anaesthesia* takes its place as the most current and comprehensive text. It deserves to be in every departmental library as an important reference. The individual chapters merit serious scrutiny by both residents and practitioners who wish to focus on the pharmacokinetics of a specific class of drugs. After whetting their appetites with one of the other texts, serious students of pharmacokinetics will wish to devour this volume in its entirety.

FREDERICK O. HOLLEY, M.D.  
Assistant Professor of Anesthesia  
Stanford University School of Medicine  
Palo Alto, California 94304

**Manual of Pediatric Anesthesia.** BY DAVID J. STEWARD. New York, Churchill Livingstone, 1984. Pages: 377. Price: \$24.00.

This book, which presents Dr. Steward's views on the joy of pediatric anesthesia, was not meant to be a comprehensive text of pediatric anesthesia. Rather, it provides a means to review important aspects of anatomy and physiology in children and to present general principles of pediatric anesthesia management as practiced by the staff of the Hospital for Sick Children, Toronto.

The clinical experience of the staff of that institution is immense, being responsible for over 14,000 anesthetics each year. The chapters present the distillation of this experience and reflect a well integrated system of preoperative, intraoperative, and postoperative care that has been demonstrated to work well. One must remember, however, that this manual represents more of a guideline than a rule in its approach toward children, and that many different solutions to a given problem exist. Thus, the advocacy of methoxyflurane in certain situations will