Clinical Management of Mother and Newborn. Edited by Gertie F. Marx. New York, Springer-Verlag, 1979. Pages: 274. Price: $29.80.

The title of this book yields little insight into the book's purpose or contents. It is not a textbook of obstetric pain relief, although its editor, Gertie F. Marx, has been indentified with that area of anesthesiology throughtout her distinguished career. Neither is it a monograph on obstetrics, neonatology or perinatal medicine, although it contains information in each of these areas whose margins are increasingly blurred and whose interdependence is apparent.

Rather, the stated purpose of this book is the presentation in 15 chapters with 18 contributors of postpartum and postnatal physiology and pathophysiology, focusing exclusively on the first few days following birth. Since this is a unique venture, one must question both the validity of the concept (is the immediate postpartum period so special as to warrent such a monograph?) and its execution (does the book achieve its stated goals?).

In my opinion, the anesthetic and obstetric management of women and their offspring during labor and delivery should not be artificially separated into ante- and postpartum compartments. Postpartum complications, with rare exceptions, are generated by ante- or intrapartum events. Maternal postpartum complications are dealt with in the first three chapters, which comprise only 41 of the 274 pages of the book. Major maternal problems, including uterine atony, pre-clampsia and eclampsia, and aspiration pneumonitis, are discussed in less than one page each. Postpartum headache, by contrast, is allotted 14 pages, an excellent review with specific recommendations for the diagnosis and treatment of this vexing problem.

The fourth chapter, "The Normal Parent–Newborn Relationship: Its Importance for the Healthy Development of the Child," deals with issues that extend far beyond the newborn period, is replete with psychosocial jargon, and ends with a plea for "family-oriented" perinatal care and the use of drugs with minimal depressant effects on mother and newborn. It is difficult to distinguish fact from hypothesis in this area so unfamiliar to anesthesiologists.

Chapters 5, 6, and 7 are definitive reviews of Apgar scoring, clinical neonatal neurobehavioral assessment, and the effects of obstetric analgesia and anesthesia on newborn neurobehavior function. These are welcome additions to this controversial and increasingly important area of public concern. Neonatal pharmacology is reviewed in chapter 8 in only five pages, sufficient only to introduce a few concepts in qualitative fashion.

The remainder of the book, seven chapters comprising two-thirds of the whole, is devoted to reviews of selected aspects of neonatal physiology, pathophysiology and clinical neonatology. Included are detailed essays on meconium aspiration, neonatal acidosis, exchange transfusion, and the infant of the drug-dependent mother. The final chapter discusses trends in maternal and perinatal mortality in New York City. Notable by its absence is a recommended plan for the immediate clinical care of the newborn in the delivery room with a discussion of resuscitation and thermal homeostasis.

As a whole, the book fails to make a compelling case that its concept is valid, that postpartum and neonatal aspects of obstetric care are so special as to warrant this treatment. Its execution reflects the lack of an underlying rationale. Although several of the individual chapters are excellent reviews of specific topics, there is little glue to bond them together and put them into perspective. This failure may reflect the fact that obstetricians, anesthesiologists, neonatologists and developmental psychologists have for the most part worked apart from each other with minimal interdisciplinary communication, joint research efforts, or shared clinical responsibilities. It is hoped that this situation will change in the years ahead to permit the production of a book such as this that will be more coherent and hence more useful.

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Laboratory Exercises in Respiratory Therapy. By Cynthia A. Shoup and Ronald N. McHenry. St Louis, C. V. Mosby, 1979. Pages: 251. Price: $10.95.

I did not approach with enthusiasm the reading and review of a laboratory exercise manual, but I was in for a pleasant surprise, for this is no ordinary workbook. Although it is intended to complement the use of traditional respiratory therapy textbooks, I found this book a fountain of information in itself.

Each chapter contains a goal, a terminal objective, a behavioral objective, a list of needed equipment, and suggested readings. Since I believe the lexicon of pedagogy serves a useful purpose, I was pleased to see this incorporated into the chapter outline. There are also investigative exercises, which are intended to allow the reader to discover information about the function, capabilities and limitations of respiratory therapy equipment. The procedural exercises encourage the learner to acquire and perfect skills in techniques used in the administration of therapy.

Originally, the manual was developed for use in respiratory therapy schools. However, the authors have discovered that the manual adapts well to use in-service training of nurses, technicians and therapists with no, or limited, formal respiratory therapy background. The exercises are written in a "self-directed" format to allow the reader to work through each exercise with a minimum amount of supervision. The manual spans the field of respiratory therapy, including chapters on manual resuscitators, IPPB devices and techniques, incentive spirometry, chest physical therapy, continuous mechanical ventilators of most types, measurement of compliance, and various forms of adjunctive therapy.

This large (8½ × 11-inch) manual is soft-covered, hole-punched so that it can be inserted into a loose-leaf binder, and has perforated pages that allow the work exercises to be handled separately. There are more than 100 line drawings and photographs. The instructions for each exercise are clearly written, and the references are appropriate. The print is large and clear, and the paper feels substantial. All in all, the authors and publishers are to be congratulated for filling an educational need with a well-written and attractive product.

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Principles and Practice of Blood-Gas Analysis. By A. P. Adams and C. E. W. Hahn. London, Franklin Scientific Projects, Ltd., 1979. Pages: 95. Price: PNS.

In this refreshingly short and refreshingly readable treatise, the authors state their intention to concentrate on the principles on which rest the understanding and measurement of blood gases. It is aimed at the level of a medical student or house officer, and I think

they accomplish their intention very well indeed. Sometimes bordering on the facile, it is a fairly comprehensive, reasonably sophisticated exposition of the related physiology, electrochemistry, and current technology; a house officer or medical student who devoted a couple of evenings to it would gain a substantially improved understanding of this subject. The book's brevity, clarity, and excellent illustrations encourage such devotion. Although it is an odd physical size (22 × 23.5 cm), its format and layout and other printer's attributes are well done.

It seems to me that the book can be divided into three general sections: the first includes a brief and competent coverage of gas laws, several short but reasonably sophisticated chapters dealing with oxygen and CO_2 transport and with acid–base balance, and a final chapter on clinical approaches to blood-gas and acid–base problems. Criticisms of this section are only that the treatment of some of the concepts is somewhat superficial: the interpretation of the partial pressure of nitrogen in the blood is neglected, for example, and the exposition of the chemistry of hemoglobin's affinity for oxygen is at the first-year medical student level. It is curious that neither Bohr nor Haldane effects are elaborated, and the treatment of acid–base balance includes several mechanisms for interpretation of acid–base problems by memory. These systems seem somewhat anachronistic, given the current widespread use of nomograms which, for the most part, are both well understood and more accurate.

The next section comprises a chapter on electrochemistry, a comprehensive treatment of the construction of the electrodes—more accurately called electrochemical cells—and some principles of their use, and concludes with a chapter on blood-gas correction factors. Other than observing that the concluding chapter is incorrectly titled, for it consists of a very good exposition of the factors by which temperature and *p*H relate to the oxyhemoglobin-dissociation curve, I have mostly praise for this middle section. The authors are clearly expert, and the section strikes a very good balance between hopelessly intricate electrochemistry and physical chemistry and the endless instructions on the practical use and housekeeping details required for operation of modern appliances. They did miss one caveat, concerning the error introduced into blood-gas measurement by the growth of microorganisms in cuvettes. Otherwise, this is good, crisp, cogent science, and I learned a lot from it.

The final section includes three chapters dealing with subjects not perfectly related to the book's title: blood oxygen content measurements, mass spectrometry, measurements of the saturation of hemoglobin with oxygen, and *in-vivo* blood-gas analysis. There are many omissions here, mandated by the very rapidly advancing state of those arts, and the utility for American readers is attenuated somewhat by the author's focus on instruments available in Great Britain. Nevertheless, there is a specific disclaimer as to its prospects of being a compendium of all available methods in clinical chemistry, and further, the book's good focus on principles makes at least portions of this section applicable in the United States, xenophobia notwithstanding.

On the whole, it is a short, tight, reasonably comprehensive and sophisticated (in the middle section, even elegantly presented), well-written and well-illustrated fundamental text. No comparable text exists: this one seems like a good investment, irrespective of the future values—relative or absolute—of the dollar and pound.

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Development of New Volatile Inhalation Anaesthetics. (Monographs in Anesthesiology.) Volume 6. By ALLEN B. DOBKIN. Amsterdam, Elsevier/North Holland, 1979, Pages: 369. Price: $70.25.

The title may mislead the casual reader. This book details the pharmacology of old and new agents; however, the attention to new or future anesthetics occupies but a small fraction of the text. Three of the 12 chapters (2, 4, and 5) deal with agents no longer widely used. The chapter on methoxyflurane is a humorous, thoughtful contribution by A. Van Poznak that explores not only the pharmacology of this "paleoanaesthetic" but the lessons learned from it that may be applied to future agents. Two chapters deal with the presently predominant agents, halothane and enflurane, whereas two more cover isoflurane and inhaled anesthetics under investigation. The remaining chapters discuss a variety of general concerns, such as biotransformation (in a succinct yet thorough contribution by R. A. VanDyke), anesthetic toxicity, vaporizers, and what the future holds for inhaled agents.

There are several strong points to this book. The detailed review of the basic and clinical status of inhaled anesthetics now has a single home. The writing is clear, often entertaining, and easily read. Over half of the chapters (seven) were written by A. B. Dobkin, who also served as editor of this monograph, and this major contribution provides continuity of style. Since Dobkin played a major role in the investigation of many modern inhaled anesthetics, his presence lends a special authority. Finally, the format of the book is clean and pleasing, and makes liberal use of figures and tables.

Some of the book's strengths are also its shortcomings. The dominant role played by Dobkin has resulted in a slant that emphasizes his work, occasionally to the near-exclusion of other important information. For example, there is no more than a passing paragraph or two devoted to the potential hazards (real or otherwise) of operating room pollution. Also, Dobkin's untimely death probably resulted in some factual errors, loss of continuity, redundancy (we are told in three places that Suckling synthesized halothane), and may have delayed publication; the latest references in the bibliographies are to publications in 1977, and I counted only four of these.

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