

book; however, it may not be of greatest interest to the general reader. It is followed by a section dealing with hypothermia.

Pathologic perturbations of cerebral metabolism include epileptic seizures, hypoglycemia, hypoxia, and ischemia. Although there has been intensive investigation of energy metabolism during seizures, it is now apparent that the tremendous increase of metabolic rate is a *result* of seizure activity and thus does little to illuminate the mechanism involved in seizure genesis. It has long been accepted that extracellular acidosis is one of the major factors involved in coupling. Yet the author provides strong evidence that shows transient *alkalosis* in several seizure models at a time when CBF is increasing. Thus, there is now considerable doubt as to the role of extracellular pH in metabolism-blood flow coupling.

Cerebral hypoxia is perhaps the subject closest to the central theme of the book as a whole. The author's literature review of hypoxia and ischemia is very thorough, and the accumulated lists of references for these chapters, as well as for all the book, are extremely valuable. Although research progress in the field of hypoxia-ischemia will probably outdate much of the information in the book within a few years, the basic information and organization within the book will remain a good starting point for those interested in the field. In the concluding chapter, on ischemia, clinicians dealing with problems of neuroresuscitation following stroke or cardiac arrest will find an excellent critical review of laboratory models and results. The discussion of possible protection of the brain by barbiturates certainly represents the "state of the art."

Aside from a few incomplete legends and poorly drawn figures, the production aspects of this book are excellent. One possible criticism of Siesjö's overall approach is that it appears to be a justification for his own very productive experimental approach to normal and pathologic cerebral energy metabolism in rats. This aside, the book remains impressive both in its overall systemic approach and in the scope and depth of discussion, and these strengths make it a valuable reference source. The author's general emphasis is to summarize and to evaluate the available literature; in this he has succeeded without question.

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Principles and Practice of Obstetric Anaesthesia. Fourth edition.

By J. SELWYN CRAWFORD. Oxford, Blackwell Scientific Publications, 1978. Pages: 392. Price: \$50.00.

This fourth edition of Crawford's text on obstetric pain relief is 25 per cent bigger than its predecessor, published in 1972, but is still somewhat "pricey" at \$50.00, presumably the result of the devalued dollar. Continuing a fine tradition in medical textbooks, so uniquely British, it is clearly the product of the thought and practice of a single, highly qualified, very experienced, and somewhat dogmatic clinician and clinical investigator. The writing is exemplary. Crawford's words leap out at the reader as though he were sitting comfortably before you and sharing his experiences. Never dry, never dull, often humorous, the book attempts to synthesize the science and practice of obstetric anesthesia from the perspective

of a clinician intimately involved in the day-to-day workings of a busy maternity hospital.

Although one could quarrel with some of the particulars, especially as they deal with the differing obstetric practices in Britain, taken as a whole, Crawford offers a rational and conservative approach to the management of pain in obstetrics. As one would expect, a great deal of emphasis is placed on lumbar epidural block and its advantages in almost every clinical situation. Indeed, the only stipulated absolute contraindication is disorder of coagulation. Interestingly, Crawford also invokes a persuasive argument for the resurrection of spinal anesthesia, rarely practiced in Britain, but which has an important place in American obstetric anesthesia. Overall, the practices described would easily fit into any well-staffed, competently run maternity service in the United States.

Crawford's advice to those about to embark on the provision of an epidural service in obstetrics is worth noting. Go slow, he counsels. Start out with uncomplicated situations almost certain to give good results so that the anesthetist, his colleagues in perinatal care, and his patients can gain confidence in the technique. With such confidence established, one can expand its use into more difficult and complex clinical situations.

Many of the points that are raised will sound familiar to those involved in the more controversial aspects of obstetric pain relief, but rarely have they been dealt with so eloquently. For example, Crawford stresses the importance of patient education in preparation for childbirth and urges an attitude of "sympathetic reassurance" among the patient's attendants. He gently chides the advocates of all of the many systems of prepared childbirth for promising too much, a panacea, with results often disastrous. "The fault here lies in the fact that the discipline of the philosophy of natural childbirth provides little scope for acknowledging that labour can be extremely painful even for the patient who is well prepared, and that for such a patient the acceptance of other therapeutic aids is not implicit of weakness or unworthiness." One can only say "amen."

Another crucial and often overlooked point is made. The appropriate provision of modern obstetric pain relief requires more careful monitoring of the patient, rather than less. "It is not acceptable to consider that just because a patient is experiencing a pain-free labour she requires less supervision and attention than would otherwise be the case. . . . It is imperative to note that a skilled 'epidural service' is not viable within the context of a slipshod and perfunctory obstetric service, just as in like manner good obstetric management can only be diminished by half-hearted or ill-conceived control of analgesia."

This reviewer is faced with an almost overwhelming temptation to go on quoting at length. Permit only two more such quotations. In his discussion of the difficulties and complications of lumbar epidural block, Crawford states, "Only a fool, a charlatan or a liar would claim never to fail to provide total pain relief by means of an epidural block." Finally, one of Crawford's most important contributions to clinical practice, documentation of the advantages of avoiding the supine position, is stressed repeatedly throughout the book. "The alternative practice of tilting the entire table laterally is not recommended: it makes the patient uneasy as she understandably feels as though she is about to slide off the table, and it makes the present writer feel uneasy because the patient might well be correct in her assumption."

If one can call a medical book "charming," this is it, so like the author himself. His review of pertinent basic science is brief and incomplete, his plea for more extensive and better controlled clinical investigation of commonly accepted practices is laudable, but above

all, his concern for the patient and her baby is outstanding. The book is well put together but suffers from a paucity of figures. It is not intended, nor is it recommended, for the novice in anesthesia, but is highly recommended reading for those already involved in and committed to anesthetic care of the woman in labor and her child.

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The Lung: Structure, Function and Disease. EDITED BY WILLIAM M. THURLBECK AND MURRAY R. ABELL. Baltimore, Williams and Wilkins, 1978. Pages: 332. Price: \$34.00.

This book is a well-written, understandable compilation of the physiology, anatomy, and pathophysiology of the lung. The editors have gathered together a group of well-known pathologists, clinical physiologists, and other physicians to discuss most of the major topics in pulmonary pathology.

The first chapter describes the ultrastructure and cellular function of the distal lung. Descriptions of excellent light and electron-micrographs of structure drive home the points being made. (In fact, each chapter has many excellent photographs). Drug-induced pulmonary disease is the next topic. The table describing the pulmonary effects of the more common drugs is quite useful to the clinician.

The next chapter is pertinent to every anesthesiologist because it extensively discusses the pathology of the adult respiratory distress syndrome. The author describes the salient features of its cause, pathophysiology and the correlation of these data with pathology. Insights into the best methods of care can be gleaned from this chapter.

The chapters on cellular biology of mucous secretion and morphologic structure and function in the lung both contribute to our understanding of pulmonary function in health and disease.

Asthma and small-airway disease are covered in two well-written, well-organized chapters. The underlying causes and pathology are discussed, which should help us provide better care for patients with these problems.

Pulmonary edema is next. The mechanisms are clearly presented and suggest possible approaches to therapy.

An often forgotten subject, pathology of the pulmonary vasculature, is well presented by people who have had an interest in the subject for many years. Their clear description of the interrelationships between the pulmonary vasculature and parenchyma should lead us to consider this relationship and problems related to the pulmonary vasculature more often as part of pulmonary disease. As we understand the relationships between the two, we will be able to devise more effective therapy.

The next two chapters deal with problems of the neonate, the sudden infant death syndrome and pulmonary disease. Both present a clear overview of the problems and the relationship of disease to physiology and pathology. Throughout, this book stresses the relationship between structure and function, something many of us have forgotten. It is certain to be useful to anyone who is faced with patients who have pulmonary disease.

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Hazards of Medication. By ERIC W. MARTIN. J. B. Lippincott Philadelphia, 1978. Pages 686. Price: \$39.50.

A second edition, written with the assistance of seven editorial consultants, this is a large volume "worth its weight in information," containing as it does one of the most complete reviews on adverse drug reactions as they may be caused by inactivation, combinations, interactions, and unfavorable patient responses.

For those interested in research and clinical applications, this book provides ideas and suggestions about experimental therapeutics, research in animals, clinical investigation, protocols, pharmaceutical developments, and warnings against errors in drug research. For those engaged in drug manufacture, this volume has guidelines on standards, formulation, production, and quality control, as well as distribution, storage, labeling, preservation and promotion of drugs.

For all practicing physicians this is the "Ten Commandments" of drug prescription. In a simple, easy-to-read style, the author gives advice about selection and dispensing, and discusses the causes of mishaps, misunderstandings, and litigation that arise from prescribing drugs.

A special section lists the drugs that may interfere with the results of clinical laboratory tests and the mechanisms and consequences of such interference. More than 200 pages are dedicated to the most exhaustive available tabulation of drug interactions; not discussed in depth, but well cross-referenced for those needing detail.

Because of the wealth of organized information and the large current bibliography, this authoritative compendium is a must for all hospital and medical school libraries, and also a highly desirable item for the personal collections of all anesthesiologists.

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Regional Blocks for Nurse Anesthetists, A Technical Manual. By PHYLIS ADAMS ROBERTS. Springfield, Ill., Charles C Thomas, 1978. Price: \$9.75. Pages : 111.

The actual motor skills needed to administer regional anesthesia involve only a modicum of dexterity and coordination. Expertise comes with possessing the knowledge to recognize the indications and contraindications for performing those skills and the eternal vigilance to recognize the early signs of untoward events. Certified Registered Nurse Anesthetists have the educational background to learn the motor skills and acquire the theoretical information necessary to administer safe conduction anesthesia. Furthermore, in the foreseeable future there will not be sufficient physician anesthesiologists to satisfy the anesthesia needs of our country. It is unwarranted to withhold the advantages of regional anesthesia when we have a large number of interested, educatable people who can learn to safely administer regional anesthesia.

This manual, however, is an inappropriate text for introducing regional anesthesia to nurse anesthetists. It is a cookbook, a by-the-numbers format of instruction. It essentially covers only the motor skill of lumbar puncture and two techniques of axillary block. The reader is referred to other texts for descriptions of anatomy, physiology and pharmacology. However, these disciplines are not trivial and cannot be gleaned, as suggested, by superficial perusal of a textbook.

An understanding of anatomy is essential to appreciate the three-dimensional relationships for successful needle placement. If this