

---

## Book Reviews

---

### **Muscle Relaxants. Basic and Clinical Aspects**

*R.L. Katz* (ed) Grune & Stratton, Orlando, 1985

This book is a multi-authored collection of articles which were published in the December, 1984 and March, 1985 issues of *Seminars in Anesthesia*. Its 28 contributors were chosen among the most active basic scientists and clinical investigators in the field of muscle relaxants, from North America and Europe. Of the 18 chapters, the first three are devoted to the basic mechanisms of neuromuscular transmission, and constitute an excellent summary of the overwhelming changes which have taken place in the past few years in our understanding of neuromuscular function. Another chapter is devoted to relaxant pharmacokinetics and pharmacodynamics. Its merit is to focus on the factors which affect onset and recovery of neuromuscular blockade, rather than giving a boring list of numbers. The rest of the book is clinically oriented. Appropriately, vecuronium and atracurium are each given a chapter. The role of succinylcholine is discussed with reference to the anticipated use of the two new non-depolarizing blockers. Reversal agents are also treated in another chapter. For North American readers, the chapter on aminopyridine may have little more than academic interest. The use of relaxants in patients with cardiac, renal and neuromuscular disease is also discussed. The other chapters deal with general issues, such as use in children, monitoring, complications, drug interactions and controversies. Among these, the exhaustive, well-referenced list of drug interactions compiled by Viby-Mogensen, and the clear discussion of relaxant controversies by Choi and colleagues are worth mentioning. In short, the choice of topics was clearly influenced by the issues which are most prominent in the 1980's. This makes the book a useful reference text for the clinician who does not have access to the *Seminars in Anesthesia* issues dealing with the subject.

François Donati PH D MD FRCPC  
Department of Anaesthesia  
Royal Victoria Hospital  
Montreal, Quebec

### **Obstetric Anaesthesia and Analgesia**

*D.D. Moir, J. Thorburn*, Baillière Tindall Publishers, 3rd edition, London, 1985

This British textbook is the third edition of D.D. Moir's *Obstetric Anaesthesia and Analgesia*. Co-authored by consultant anaesthetist J. Thorburn, consultant obstetrician M.J. Whittle has contributed the chapter entitled *Modern Management of Pregnancy and Labour*. The book is written "primarily for a British readership" of "anaesthetists in training and for their senior colleagues ... responsible for the provision of a service for the obstetric unit."

The textbook has two major strengths. First, it provides extensive reference lists at the conclusion of the chapters dealing with physiology of pregnancy, pharmacology of drugs used in labour, systemic and inhalational analgesia, regional and general anaesthesia. The most recent references are from 1985. Secondly, management of general and regional anaesthesia in the obstetrical patient is discussed in depth with emphasis on patient safety.

Discussions pertaining to control of gastric acidity, failed or difficult intubation, and regional anaesthesia have been updated and rewritten. New material, such as the topic of epidural and intrathecal administration of opiates has been included. The chapter on the history of obstetric anaesthesia is informative. However, the style of writing is often tedious and repetitious; frequently the impact of significant points is dissipated in unwieldy text. There is a noticeable lack of simple illustrative figures and concise tables. While the text emphasizes anaesthetic technique, too brief and superficial consideration is directed to the assessment and treatment of obstetrical and medical complications of pregnancy. The final chapter of the book unsatisfactorily touches on assessment and resuscitation of the newborn. Guidelines for resuscitation are imprecise, in particular the recommendations regarding administration of basic cardiopulmonary resuscitation, and administration of sodium bicarbonate. The text has a decidedly British approach to the management of certain problems, for example,

preeclampsia. It would have been of interest to compare European and North American techniques. The use of magnesium sulphate so prevalent in North America is mentioned under the section on miscellaneous drugs.

This textbook serves as a basic reference for the techniques of provision of regional and general anaesthesia to the healthy pregnant patient. The failure of the authors to discuss the application of these techniques to more complicated and demanding situations in labour and delivery is a disappointment and as a result this text cannot be recommended as a comprehensive overview.

J. Swartz MD FRCPC  
Department of Anaesthesia  
Women's College Hospital  
Toronto, Ontario

**Current Topics in Anaesthesia Series, Neonatal Anaesthesia and Perioperative Care. 2nd Edition.**

*David J. Hatch, Edward Sumner.* Arnold Pubs. London, 1986

The Current Topics in Anaesthesia Series provides continuing medical education on specialist subjects. This second edition of Drs. Hatch and Sumner's book retains the format of its predecessor. It is compact but offers comprehensive reviews of perinatal anatomy and physiology, and the basic principles of neonatal anaesthesia and perioperative care; all written in a succinct and clear manner. Selected topics such as cardiac surgery and respiratory obstruction are discussed separately and the anaesthetic management of these conditions is suggested in accordance with the clinical practice of the authors. It is surprising, though, that they maintain that the effectiveness of muscle relaxants drugs is best judged by the degree of surgical relaxation, without reference to peripheral nerve stimulation. Many would dispute that sickle cell disease is unimportant in the first few months of life now that early detection and treatment may void life-threatening postoperative complications.

The major weakness of the text is its failure to include much of the new information published in this field over the last few years. It is inadequately

referenced and relies too heavily on publications of the early 1970s, updated with a number of recent review articles. Nevertheless, it remains easy to agree with one of the reviewers of the 1981 edition, who found this book eminently readable and recommended that it would be useful to all anaesthetists, but particularly to those preparing for examinations.

"Neither the old nor the new, by itself, is interesting; the absolutely old is insipid; the absolutely new makes no appeal at all. the old *IN* the new is what claims attention."

William Jones (1842-1910)

Joan C. Bevan, MD FFARCS  
Department of Anaesthesia  
The Montreal Children's Hospital  
Montreal, Quebec

**Disorders of Fluid and Electrolyte Balance: Diagnosis and Management.**

*J.B. Puschett* (ed.) Academic Press Canada, Don Mills, \$32.00.

This is a multi-authored text and this can often lead to boring re-duplication or confusing contradiction for the reader. The principal author(s) of this review seem to have avoided these common pitfalls and have produced a lucid and useful book which proceeds from first principles throughout. The main problems of electrolyte disturbance are well covered, including potassium, phosphate and magnesium and there is a good chapter on disorders of urate metabolism. The inclusion of a chapter on peritoneal dialysis is somewhat unusual in a work of this nature but proves most successful and useful.

It is perhaps rather a picayune criticism but the use of  $p\text{CO}_2$  rather than  $\text{PCO}_2$  in the Henderson Hasselbach equation is rather confusing. However, the picayune nature of this criticism serves only to highlight the overall virtues of this useful book.

K.M. Leighton MB FRCPC  
Department of Anaesthesia  
UBC Health Sciences Centre Hospital  
Vancouver, British Columbia

**Handbook of Physiology – The Respiratory System: Circulation and Nonrespiratory Functions.**

*A.P. Fishman, A.B. Fisher* (Eds.) American Physiological Society, Bethesda, MD, 1985. (Williams and Wilkins, Baltimore MD) \$136 (us)

This hardcover, 572-page comprehensive overview is written by 28 respected authors. It is indexed, well-referenced, and liberally sprinkled with figures and tables. Compared to the more traditional organ physiology covered in the remaining volumes of "The Respiratory System" (control of breathing, mechanics of breathing, and gas exchange), this reference book also extends into some newer areas of respiratory biology.

The first four chapters deal with lung development, lung cell biology, and the pulmonary circulation, interstitium, and lymphatics. The next eight chapters cover cell metabolism and the metabolic functions of the lung (for example, the metabolic role of the pulmonary capillary endothelium to protect vital organs in the systemic circulation (brain and heart) from bioactive agents from the hepatic and peripheral circulations). The final five chapters cover pulmonary defence mechanisms (from mucociliary clearance to macrophages) and control of blood coagulation and thrombosis.

The intertwining of structure and function is highlighted. For example, in the discussion on the alveolar-capillary barrier, understanding of large molecule transport through the interstitium depends not only on physical channels but also on biochemical interaction with the ground substance.

This book is a useful, current library reference to address any question relating to the circulation or nonrespiratory functions of the lung.

Peter H. Breen, MD FRCPC  
Department of Anesthesia and  
Critical Care  
University of Chicago  
Chicago, Illinois