

of Morphine," "Patient-Controlled Analgesia," and finally "Clinical Value of Systemic Opioids." The subsection on routes of administration contains articles on oral, sublingual, transdermal, transnasal, and rectal administration of opioids. Each article describes the rationale, method, and clinical experience with each route. Many of the routes certainly will be of limited use, but each may be helpful in complicated situations, and are well worth knowing. Oral morphine receives a great deal of attention, and rightly so; it remains the most practical and widely used agent in chronic pain relief. The three articles on controlled-release formulations, in particular, provide an excellent review of the effectiveness of these formulations and serve as a guide for clinical management. Patient-controlled analgesia appropriately receives a great deal of attention, since it is becoming the standard of postoperative care for patients.

The first article in this section, by Leahmann *et al.*, reviews clinical experience and potential uses of patient-controlled analgesia in pain research. Each of these sections is concise and well-referenced, serving as a useful starting point for anyone interested in either using or studying this particular mode of pain relief. The remaining articles describe various authors' experiences with this mode of pain relief in various clinical settings. The remaining section, on the clinical value of systemic opioids, includes reviews of opioids and postischemic encephalopathy, physiologic effects of and the rationale for treating acute pain, and the clinical and logistical management of cancer pain.

This volume is not intended to be a comprehensive review of opioid analgesia. It does, however, present innovative and stimulating concepts in the rapidly evolving area of opioid analgesia. It is probably of most use to researchers and clinicians who are already familiar with opioid analgesia. The basic science section, although detailed and somewhat tedious, develops concepts that may prove essential to clinicians wishing to apply basic science to clinical practice and clinical research. The clinical applications section provides readily useful information to practitioners currently prescribing opioids, as well as a preview of potentially new areas of development in systemic opioid analgesia.

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Fiberoptic Airway Endoscopy in Anesthesia and Critical Care. By Andranik Ovassapian. New York, Raven Press, 1990. Pages: 129. Price: \$105.00.

This monograph summarizes the work of Dr. Andranik Ovassapian, a leader in the growing practice and teaching of fiberoptic airway endoscopy in anesthesia, and includes contributions by five colleagues from Northwestern University. It is so richly illustrated (I count 146 illustrations, many with color photographs of live airway anatomy, pathology, and instrumentation, and at least 50 tables) that it blurs the distinction between atlas and monograph. The slim, folio-sized volume is divided into 11 chapters, averaging 15 pages in length, that are well referenced both with basic historical sources (*i.e.*, pre-Medline) and with reports as recent as early 1989. The style and format of presentation are consistent throughout the monograph. Dr. Ovassapian co-authored 3 of the 11 chapters and wrote 7 himself. Each is introduced by a brief outline of topics referenced by page number for quick access. Four are concluded by succinct summary outlines that bring a body of useful technical information together in a concise format.

The text offers a practical course in fiberoptic airway management. The chapter order is logical: the sequence builds from basic information to illustrative case reports that demonstrate the utility of fiberoptic techniques in clinical practice. Basic working principles and a brief history of flexible fiberoptic bronchoscopes are presented in a 15-page

chapter at the outset that concludes with a useful list of do's and don'ts. A nine-page chapter devoted to anatomy presents a digestible combination of review information together with good color photos of the airway as seen *via* an adult bronchoscope from nasopharynx to pulmonary segmental orifices. The third chapter was contributed by a radiologist and presents the most succinct, current radiographic imaging of the airway I have seen to date. Views include computed tomography and magnetic resonance imaging cuts. Several problem-oriented case presentations of typical airway pathology present a radiologic perspective. There are 33 x-rays or illustrations in this 30-page chapter. This chapter alone makes the book a worthwhile purchase. The fourth chapter briefly presents clinically relevant techniques for airway anesthesia (12 pages, 10 illustrations, and 59 references) and concludes with an outline of ways to avoid toxic reactions.

For most readers, the core of the monograph will be found in the fifth through tenth chapters. These include techniques for fiberoptic intubation (23 pages, 19 illustrations, and 64 references); endobronchial intubation and/or blockade (25 pages, 17 illustrations, and 81 references); fiberoptic manipulations useful in critical care practice, including fiberoptic tube change and nasogastric tube passage; approaches to the difficult airway (well-referenced, with 77 citations); management of the difficult intubation (14 pages and 112 references); and ten well-selected case reports (12 pages and 22 illustrations). These case reports are so well-illustrated and well-thought-out that I wished for more.

The volume concludes with a short chapter that discusses the teaching and learning of fiberoptic techniques and that outlines the stages and objectives of the long-running Northwestern University endoscopy course. This would assist any anesthesia department in setting up a fiberoptic credentialing basis for active staff and help interested teaching faculty involved in resident education or continuing medical education (CME) programs. The four-page index is brief and topical; however, to this reader, it seems more likely that quick reference would easily be expedited by looking at the outline at the beginning of the appropriate chapter.

It is customary for reviewers to note deficiencies. I found only one misnumbered reference. Only a very few of the many illustrations and tables seemed remote from the accompanying text, but each is so well-captioned that it makes complete sense. As one would expect from an anesthesiologist whose practice is largely adult, there is a dearth of pediatric case material and experience presented here, although the basics can be found. A more interesting criticism that some might offer is that the Northwestern group and Dr. Ovassapian, like me, recommend awake airway instrumentation for the beginner. An opposing school of thought is that the practitioner should first learn under the most difficult of circumstances under general anesthesia without an actively maintained airway so as to be better prepared for difficult scenarios or failed intubation. To his credit, Dr. Ovassapian has taught, documented, and collected clinical data of fiberoptic intubation under anesthesia and has contributed some procedural and technical innovations. This is well reported in the monograph despite an understandable bias towards awake, planned fiberoptic intubation.

As an advocate of fiberoptic techniques for airway management, I believe that this monograph offers value for the dollar. The production quality is excellent, and the language is straightforward and readable. Step-by-step illustrations of each technique and the well-written coverage of each topic make it much more than an expanded review. Additionally, data derived from the Northwestern University teaching and clinical experience are compared with the growing literature on each topic. As an atlas alone, the volume would be worth the cost—less than 50 cents per illustration.

This is the second published monograph geared towards the practicing anesthesiologist. It comes with a more complete data base—the result of 7 more years of experience—and contrasts favorably by including more illustrations from living material and by offering better-referenced, more comprehensive detail of procedures. Fiberoptic

techniques have evolved from clever tricks within the ken of a few cross-trained initiates to established procedures from the recognized armamentarium of the modern anesthesia practitioner. The monograph is, in effect, a cut-rate CME course in fiberoptic techniques and their application for the beginner and more experienced clinician. This favorably prejudiced reviewer found it enjoyable vacation reading with more than a few pearls and something useful in each chapter. The monograph delivers on its promise and effectively furthers Dr. Ovasapian's "single-minded commitment to this area," as noted by Dr. Bruner in the forward. It should effectively "facilitate the use of fiberoptic endoscopes in anesthetic and critical care practice" and belongs

in every anesthesia library as well as on the bookshelf of experienced clinicians who wish to critically review or update their practice.

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