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Handbook of Neuroanesthesia, Third Edition. By Philippa Newfield and James E. Cottrell. Philadelphia, Lippincott Williams & Wilkins, 1999. Pages: 431. Cost: \$39.95.

The third edition of the *Handbook of Neuroanesthesia* has a new look compared with the second edition. First, the text has been reorganized in an outline manner and supplemented by graphs, figures, and tables, which is more efficient and easier to comprehend for the reader. Second, and more importantly, the authors have updated this book with the most advanced knowledge and techniques of neuroanesthesia, and they have included some new topics, such as preoperative evaluation, neuroradiagnostics, nutrition, and others. Finally, the smaller size of this new edition makes it fit more easily in one's pocket.

This book is divided in three sections: General Considerations, Clinical Anesthesia Management, and Neuro-Intensive Care issues. Each section contains chapters that are written by different authors. In section 1, the authors start with advances in basic neuroscience and review neurophysiology and pharmacology, including, for example, evaluation of the effect of new volatile and intravenous anesthetics on cerebral blood flow/cerebral metabolic rate regulation. For perioperative monitoring, in addition to the traditional techniques, the author also briefly discusses some newer techniques (such as transcranial Doppler ultrasonography, jugular mixture venous oxygen saturation, cerebral oximetry, and others), providing a useful introduction to the reader. The chapter on cerebral protection and resuscitation contains a diagram that illustrates the relations among primary injury, neurotransmitters, and secondary injury, and it discusses some of the interventions to prevent or decrease secondary injury. This includes an emphasis on things that are a focus in the operating room every day (maintaining global/cerebral oxygenation, avoiding hypoperfusion and hyperglycemia, decreasing temperature, and others). In part 2, each chapter clearly discusses some of the key points for different neurosurgical procedures (e.g., patient positioning, induction, maintenance, and emergency anesthesia). Each chapter also contains a list of pitfalls and clinical scenarios. The authors updated this handbook with some of the newest practice guidelines (e.g., preoperative evaluation for patients undergoing carotid endarterectomy, and so forth) and the most advanced techniques, including neurodiagnostic and interventional neuroradiologic procedures, which are areas of increasing involvement for anesthesiologists. In addition to routine postoperative intensive care unit treatment, part 3 discusses new protocols for initiating and weaning patients from ventilatory support and for nutritional management as examples of anesthesiologists' expansion out of the operating room and into perioperative medicine.

Because each chapter is written by independent authors, with each chapter trying to stand on its own, there are some duplicated graphs, figures, and even text in this book. Overall, this is an excellent handbook. As a newly trained neuroanesthesiologist, I still remember the days of running between the operating room and different sites, including the magnetic resonance imaging building and interventional radiology suites. A pocket-size handbook of neuroanesthesia (which could fit easily into a scrub pocket) would be helpful as a quick reference to start some of the uncommon procedures in these settings. At \$39.95, it is worth the cost. I recommend this book to anesthesia residents, neuroanesthesia fellows, and practitioners who perform only occasional neuroanesthesia procedures in remote sites as a quick reference resource.

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Anesthesia Review. By Michelle Bowen-Howard. Philadelphia, Lippincott-Raven, 2000. Pages: 380. Cost: \$39.95.

Anesthesia Review is not what I expected and emphasizes the cliché, "Don't judge a book by its cover." The majority of the book is written in the typical and popular outline format of many other review textbooks. I always have thought this format to be unpalatable and difficult to read, although I know others prefer it because it allows quick acquisition of key information. This review text, however, is different. It is divided into three main sections: (1) focused questions, (2) outlined answers to the questions, and (3) pertinent case scenarios. The text is subdivided into sections about general aspects, physiology, pharmacology, subspecialty anesthesia (including regional and pain management), and coexisting disease. Although far from complete, this text would be a good study guide for anesthesiologists, anesthesia residents, and nurse anesthetists who are preparing for examinations. I also think this book would make a great addition to an academic anesthesiologist's bookshelf.

The greatest strength of this book is its use as a teaching tool for key concepts. The author originally created it as part of an anesthesia resident education curriculum. The question-and-answer design helps to stimulate discussions between faculty and students and to improve acquisition of knowledge. It is important to use the book as it was designed. First, the question section stimulates discussion and forces the reader to think through the question. Second, the answer section allows the reader to check his or her knowledge and acquire the necessary information. Third, the reader can apply this new information to the case scenarios in the final portion of the book. As I read this book, I used it as a teaching tool for residents (and students) and found it to be an effective tool, if used properly (as outlined previously). Sometimes, the questions led to more questions and to further investigation beyond the answers contained in this book. I believe this is what the author wanted to achieve.

My biggest complaint about this book is not the content, but the way it is organized. I would have preferred a more compartmentalized design. As written, the book contains the entire question section (pages 3-104) followed by the answers (pages 105-337), and the case scenarios are toward the end of the book (after the references). The constant flipping back and forth is consistently a minor annoyance. It is also easy to lose one's place. It may have been easier to follow the questions for each topic immediately by answers and a case discussion.

I would have liked more diagrams throughout in the book. The author used some very effective ones, such as the Mapleson circuits, end-tidal carbon dioxide tracing, the oxyhemoglobin curve, pulmonary function tests, and flow volume loops. These diagrams were presented in a simple and reproducible fashion.

Although this book may not teach everything the reader needs to know about anesthesia, it expands the mind and makes the reader think. Compared with other review books, this one is priced competitively. If properly used (question-and-answer format), it is a great tool for learning key concepts, which are necessary for passing exams. More importantly, it provided me with endless material for torturing the residents: "Tell me, how does the viscosity of a gas affect the flow rate during turbulent flow? And while you are thinking, draw me the Mapleson circuits!"

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