

Out of Operating Room Anesthesia

A Comprehensive Review

Basavana G. Goudra
Preet Mohinder Singh
Editors

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Foreword

Out of Operating Room Anesthesia: A Comprehensive Review (OORA) discusses the delivery of anesthesia care for surgery and invasive diagnostic and therapeutic procedures in areas other than in the standard operating room. Delivery of anesthesia care in these settings is a widely accepted practice that has grown by leaps and bound in recent years, and will certainly continue to grow in the years to come. This growth brings with it new challenges that are unique to this field. In particular, as the delivery of care outside the typical operating room environment has become more commonplace, so has the tendency to undertake more complex surgeries and procedures with increasingly complicated (ASA III-IV, debilitated and elderly) patients. For example, the procedure may only be a colonoscopy. However, in a patient who is 157 cm (5' 2") and weighs 118 kg (260 lbs) with a history of sleep apnea and a Mallampati III airway, the risk of a respiratory arrest with minimal sedation is non-trivial. The pressures to care for significant numbers of patients daily in the out of operating room setting while maintaining the same safety and quality standards expected in the operating room create an enormous challenge. Therefore, now is the perfect time to codify in a monograph, practices and principles that can guide the delivery of patient care in this now significant segment of anesthesiology.

OORA provides a much-needed guide to the important specialty of out of operating room anesthesia care. Dr. Goudra has done an outstanding job compiling a comprehensive set of topics and presenting them in a way that is easy for any anesthesia caregiver to readily comprehend, and most importantly, place into practice. The contributing authors are all well-respected practitioners in out of the operating room anesthesia care from the United States and Ireland. The monograph consists of 32 chapters organized in 8 logical parts. Parts 1 and 2 lay out, respectively, general principles and specific patient safety concerns administering anesthesia care to patients outside of the operating room. Much of the core management material is presented in Parts 3–5 in the monograph where the authors discuss anesthesia care for gastroenterology (Part 3), cardiac (Part 4) and neuroradiology (Part 5) procedures. Parts 6 and 7 describe the management of selected special cases, whereas Part 8 outlines the enormous possibilities for anesthesiology research in areas outside of the operating room. Dr. Goudra and colleagues have expanded into a

monograph a significant volume of material that typically appears in only a few chapters in a standard anesthesiology textbook.

Dr. Goudra is uniquely qualified to write and edit OORA. He draws upon more than 20 years of experience as an anesthesiologist practicing in India, Ireland, the United Kingdom, and the United States. In addition to being an experienced practitioner in the out of operating room setting, he has devised a number of anesthesia innovations including novel designs for a bite block, airway, and a mask airway. I recently spent time with Dr. Goudra in the operating room at the University of Pennsylvania to learn first-hand his approaches for managing total intravenous anesthesia. It is without question time very well spent!

I strongly support and endorse the work that Dr. Goudra and his colleagues have so nicely assembled in OORA. It is a must read for anesthesiologists, residents, fellows, and nurse anesthetists to gain up-to-date, step-by-step management recommendations for delivering anesthesia care outside the operating room. OORA is an important contribution to maintaining and improving care in this now significant segment of anesthesiology practice.

Sincerely,
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Preface

Out of operating room anesthesia challenges are discussed in almost all anesthesia textbooks. Moreover, there are at least two books dedicated to the area already available. With this in the background, one might wonder the necessity and timeliness of yet another book. The project can only be justified with one or more of the following three criteria and we hope that all three are met in this maiden edition.

The field of out of operating room anesthesia has evolved beyond belief. About two decades ago, most gastrointestinal (GI) endoscopic procedures were diagnostic and performed either awake or after administration of midazolam. Nearly all neuro-radiological procedures were diagnostic scans, occasionally requiring sedation or general anesthesia. Electrophysiological procedures were largely restricted to cardioversions and pacemaker insertions. As we fast-forward two decades, the array of procedures performed in all these areas is of epic proportions. Therapeutic GI endoscopic procedures are performed in large numbers on a daily basis. Apart from highly evolved pacemaker insertions and reinsertions, the growth in the area of cardiac ablation is phenomenal. Neuroradiological approaches involving coils and stents have already limited the scope of neurosurgery. Thoracic surgery has seen a major decline as a result of therapeutic bronchoscopy. The ongoing research promises that 10–20 years henceforth, the out of operating procedures will overtake operating room procedures—both in volume and complexity. In all these locations, the presence of anesthesia provider is ubiquitous. Consequently, there is an absolute need for another dedicated book in the out of operating room area.

Another factor is the content. This book is much more practice oriented. Although topics such as organization, layout, and management of the out of operating room practice are important, we have deliberately left them out. Instead, extensive focus is on the various aspects of administration of anesthesia. As editors, we would like to consider all the chapters as outstanding.

The third reason to write a book is to present the subject matter in a unique style. Wherever appropriate, the chapters are bulleted and we believe that this feature would increase the pleasure of reading. A brief abstract is presented for many chapters summarizing the salient features. Additionally, tables and figures are used as applicable.

Although family support is essential during such endeavors and we appreciate their support, more importantly we would like to acknowledge the precise and dependable assistance provided by Wade Grayson, the developmental editor at Springer. We also appreciate the guidance accorded by Joanna Renwick, Clinical Medicine Editor at Springer. It was a pleasure to work with both of them.

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Basavana Goudra, MD FRCA FCARCSI
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