

AVOIDING COMMON ANESTHESIA ERRORS

2nd
EDITION

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PREFACE

“Good decisions come from experience, and experience comes from bad decisions.”

—Mark Twain

All medical providers are awash in information with more and more being published each week. The relevant publications are well summarized in a multitude of anesthesia textbooks to define the science of medicine. But what about the art of medicine? One could memorize Miller’s *Anesthesia* without having any idea how to plan or execute an anesthetic. While checklists guide the response to an emergency, experience guides the seasoned practitioner away from that emergency. This book guides the reader through means to identify potential problems, develop plans to avoid those problems, and to treat those problems to minimize their impact on the patient’s recovery.

Many texts have been published that describe errors by extrapolating scientific studies and adding expert opinion. Those texts often neglect to spell out a plan. The *Avoiding Common Errors* series provides plans for avoiding and treating situations and communicates those plans in an informal and often humorous manner. As Mark Twain is quoted above, there is a lot to be learned from bad decisions. However, there is no reason to make all those bad decisions yourself! Reading about the risks and pitfalls of various strategies is a good way to avoid complications.

The first edition of this book reviewed 215 situations in which common errors might occur as an effort to convey highlights from the published literature and expert opinions based upon the experiences of over 300 authors. It was very popular here in the United States and was also published in six foreign language editions. This second edition describes the cause, diagnosis, and treatment of a total of 305 situations. The text reflects on the conversations that occur between a seasoned attending anesthesiologist and a trainee before a case. Like those conversations, most chapters can be reviewed in 10 minutes or less. The situations can be used to spur conversations with trainees as well. Although some of these situations are infrequent, they are very relevant when they do present. Each patient is rightfully only concerned with their own situation and most patients fully expect to awaken perfectly well after their procedure, regardless of their preoperative status or the complexity of the procedure. Hospital administrators tend to agree with them. This text provides strategies to optimize the risks and benefits of anesthesia for your patients ... and keep you off the podium at the Morbidity and

Mortality conference, and maybe even out of the courtroom.

In reviewing, revising, and developing new content, we once again owe a tremendous debt to our contributing authors and section editors. Everybody who contributed to the book enthusiastically gave us their interest, time, and expertise. We literally could not have put *Avoiding Common Anesthesia Errors, Second Edition* together without them. Our section editors were just astounding in their dedication to the project and we are grateful for their patience and commitment.

We would also like to give additional special mention to several individuals. These are the individuals who took topics and subjects on a moment's notice and developed them with expertise, commitment, and good humor. First and foremost, we thank Raymond G. Graber, MD for joining us as Associate Editor-at-Large while the manuscript was "in preparation" and researching, reviewing, and writing up a number of important topics, with the quickest possible turnaround. We also thank Brandon Togioka, MD, Juraj Sprung, MD PhD, Toby Weingarten, MD, Erica Wittwer, MD PhD, Edwin G. Avery IV, MD, and the perioperative nursing staff at the University of Pittsburgh Medical Center for being terrific "go-to" people whenever we were stalled on a topic.

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This book has its own dedicated section pertaining to perioperative drug--drug interactions (DDIs), naturally. In putting this material together, we once again reviewed just about every published paper of Evan Kharasch, MD PhD. And so we thank him, as before, for his pioneering research in the field of DDIs and the cytochrome P450 enzyme system—it continues to motivate and inform our educational efforts in this important and relevant area of clinical perioperative practice.

We extend our gratitude to a number of senior physicians for their unique contributions: John L. Cameron, MD at Johns Hopkins for renewing his permission for us to quote him, Robert Gaiser, MD at the University of Kentucky for writing our foreword, David Zvara, MD FAHA for writing our concluding chapter, Peter Biro, MD for helping us with his unique expertise, Randal O. Dull, MD PhD for developing

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FOREWORD

It was Einstein who said, “Anyone who has never made a mistake has never tried anything new.” Any person, regardless of their level of experience, is at risk for error if approaching something new. No one wants to make a mistake and we do everything in our power to avoid it. As physicians, we are more in tune to mistake prevention because of the consequences of our mistakes. Any error may have a significant impact on the patient or their well-being. The best means to prevent an error is to practice the motto from the Boy Scouts, “Be prepared.” We become prepared by educating ourselves and by ensuring that all necessary equipment and personnel are available.

What is the best means to educate ourselves? This book, *Avoiding Common Anesthesia Errors*, is a step in the right direction. With the information readily available and referenced, the book provides the knowledge to prevent common mistakes in anesthesiology. It is intended for the students in anesthesia, both medical students and residents. It allows them to enter a new situation informed and prepared. However, it would be a disservice to state that the book is only for the novice. As I advance in my years, some things which were previously old are now new as I am asked to perform an anesthetic or a technique that I haven’t done in several years. Furthermore, as the specialty advances, previously learned information and techniques no longer apply and new information must be learned. The book encompasses the entire range of patients from the pediatric to the geriatric, addressing the skills such as airway management, invasive monitoring, and regional anesthesia to name a few. This book is clearly one that should be readily available to both the trainee who is in the midst of medical school or residency and the expert who discovers their area of expertise is too narrow for the current practice in Anesthesiology. To err is human, to own and to read this book, sublime.

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CONTENTS

Preface

Foreword

Acknowledgments

Contributors

■ VENTILATION AND AIRWAY

1 Introduction

Steven L. Orebaugh, MD

2 Basics of Airway Management (Part I)—Always Keep in Mind Complications That Can Occur With Existing Endotracheal Tubes and Tracheal Extubation

Toby N. Weingarten, MD, Adam D. Niesen, MD, and Juraj Sprung, MD PhD

3 Basics of Airway Management—Part II (More Tips and Tidbits to Read on the Train)

Richard Wick, MD, Catherine Marcucci, MD, and Steven L. Orebaugh, MD

4 Optimize the Airway: Bag–Mask Ventilation

Steven L. Orebaugh, MD

5 Optimize the Airway: Direct Laryngoscopy

Steven L. Orebaugh, MD

6 Oxygen Is a Drug

Eugene Raggi, MD and David G. Metro, MD

7 Advantages and Disadvantages of the Laryngeal Mask Airway (LMA)

Paul C. Anderson, MD

8 Avoiding Challenges With Video Laryngoscopy

Michael Aziz, MD

9 Do Not Overinflate the Cuff of the Endotracheal Tube

Shawn R. Palmeri, MD

- 10 Consider the Use of Lidocaine in the Cuff of the Endotracheal Tube, but Be Aware of the Risks and Alternatives**
Jamey E. Eklund, MD and Paul Kempen, MD PhD
- 11 An Easy Intubation Does Not Guarantee an Easy Reintubation—Especially After a Carotid Endarterectomy or Cervical Spine Surgery**
Steven L. Orebaugh, MD, Heath Diel, MD, and Randal O. Dull, MD PhD
- 12 Plan for an Airway Fire With Every Head and Neck Case**
Julie Marshall, MD
- 13 There Are Special Considerations Involved With Both Intubation and Chronic Airway Management of Burn Patients**
Joshua Knight, MD
- 14 To PEEP or Not to PEEP—That Is the Question**
Christopher Howson, MD and Ibtesam Hilmi, MBChB FRCA
- 15 This Is No Time for Wishful Thinking: Always Troubleshoot an Increase in Peak Airway Pressure**
Adam D. Niesen, MD and Juraj Sprung, MD PhD
- 16 The Key to the Smooth and Skilled Placement and Use of Double-Lumen Endotracheal Tubes Is to Take It One Step at a Time**
Patrick J. Hackett, MD and Jay K. Levin, MD
- 17 Avoid Common Airway and Ventilation Errors in Morbidly Obese Patients**
Francis X. Whalen, MD, Toby N. Weingarten, MD, and Juraj Sprung, MD PhD
- 18 Anesthesia for Awake Intubations**
Chauncey T. Jones, MD
- 19 Awake Intubations—Being Able to Do Them Comfortably and Safely for the Patient Is the Benchmark for the Airway Expert**
Chauncey T. Jones, MD
- 20 Airway Management in the ICU, Including the Dreaded Leaking Cuff—How to Bring Your Best Game**
Margaret K. Menzel Ellis, MD and Matthias J. Merkel, MD PhD

- 21 Ludwig's Angina**
Anne Lemak, DMD, Todd M. Oravitz, MD, and William John Wallisch IV, MD
- 22 Jet Ventilation—How to Adequately Handle This Exotic Ventilation Technique and Earn the Admiration of Your Spectators**
Peter Biro, MD DESA
- 23 High-Frequency Jet Ventilation—The View From Philadelphia**
Jeff E. Mandel, MD MS
- 24 Know How to Perform a Cricothyroidotomy**
Keith A. Chadwick, MD and Mark K. Wax, MD FACS FRCS(C)
- 25 Don't Make the Mistake of Thinking That a Tracheostomy Is a Guaranteed Airway**
Steven L. Orebaugh, MD
- 26 Helium for the Compromised Airway—You Have to Understand the Principles and Properties but We've Seen Some Amazing Saves**
Anne Elizabeth Kamarchik, MD, Theresa A. Gelzinis, MD, and J. Mauricio Del Rio, MD

■ LINES AND ACCESS

- 27 Introduction**
Brian T. Gierl, MD and Catherine Marcucci, MD
- 28 Remember That the IV Start Is Your First Chance to Make a Favorable Impression on the Patient**
Christina Stachur, MD MPH, Hassan Mohamed, MD, and Catherine Marcucci, MD
- 29 Never Use an Intravenous Line Without Palpating and Inspecting It Visually**
Mark M. Smith, MD, Ryan McHugh, MD, and Juraj Sprung, MD PhD
- 30 Intraosseous Access**
Toby N. Weingarten, MD
- 31 Central Line Placement: Never Neglect the Basics**
Hassan Mohamed, MD and Brian T. Gierl, MD

- 32 Avoid Technique-Related Central Venous Catheter Complications by Using Modern Tools**
J. Saxon Gilbert, MD and Karen Hand, MB BS FRCA
- 33 Pulmonary Artery Catheters—Still Relevant and Still Worthy of a Cautious Approach**
Valerie Sera, DDS MD, Jarna R. Shah, MD, Matthew W. Caldwell, MD, and Erica D. Wittwer, MD PhD
- 34 Don't Overflush Lines**
Julie Marshall, MD and Peter Rock, MD MBA FCCM
- 35 Inadvertent Intra-Arterial Injection Can Result in Severe Patient Injury**
David Barbara, MD, Michael Hogan, MD, Surjya Sen, MD, Toby N. Weingarten, MD, and Juraj Sprung, MD PhD
- 36 Do Not Use the Subclavian Vein for Central Access of Any Type in a Patient Who Is On or Planned for Dialysis**
Catherine Marcucci, MD and Michael J. Moritz, MD FACS
- 37 Consult the Surgeons Immediately if Your Patient Loses a Patent Hemodialysis Fistula—This Is a Serious Complication for the Patient**
Steven J. Busuttill, MD

■ FLUIDS AND RESUSCITATION

- 38 Introduction**
Brian T. Gierl, MD and Catherine Marcucci, MD
- 39 Crystalloid Fluids: More Than Just a Dash of Salt**
Sephali Patel, MD and Brian T. Gierl, MD
- 40 Hypertonic Saline: Still the “Solution” to the Solution Problem?**
Lavinia Kolarczyk, MD, Colleen Moran, MD, and Patrick J. Forte, MD
- 41 Synthetic Colloid Solutions Have Distinct Properties and Risk/Benefit Ratios That Require Your Attention!**
Lindsay M. Stollings, MD and Raymond M. Planinsic, MD FASA
- 42 Do Not Use CVP to Guide Fluid Resuscitation**
Ryan J. Fink, MD

■ TRANSFUSION MEDICINE

43 Introduction

Melissa R. George, DO

44 Know What Screening Tests Are Performed on Volunteer Donor Blood

Melissa R. George, DO and Andrew M. Gross, MD

45 Red Blood Cell Primer

Melissa R. George, DO

46 Type and Screen or Type and Cross-Match?

Diana S. DeAndrade, MD and Michael L. Boisen, MD

47 Special Circumstances: Patients With Antibodies

Melissa R. George, DO and Sprague W. Hazard III, MD

48 Plasma—It's Not Just to Fix an Abnormal INR

Melissa R. George, DO, Brian T. Gierl, MD, and Raymond G. Graber, MD

49 Plasma Part II: Is This Plasma or Pea Soup?

Catherine Marcucci, MD and Melissa R. George, DO

50 Remember That the “Universal” Donor Is Different for Red Cell and Plasma Products

Derek S. Lauter, MD and Brian T. Gierl, MD

51 Platelets—Often a Mystery!

Gerhardt Konig, MD

52 Cryoprecipitate—The Most Misunderstood Product in the Blood Bank

Melissa R. George, DO and Sprague W. Hazard III, MD

53 Washed Blood Products Are a Source of Confusion—Here's Some Help

Melissa R. George, DO and Sprague W. Hazard III, MD

54 This TEG Tracing Looks Like a Rorschach Blot ... Is It Time for a Transfusapalooza?

Edwin G. Avery IV, MD, Daniel Diaczok, DO, and Melissa R. George, DO

55 Transfusion Reactions

Melissa R. George, DO