Moderate and Deep Sedation in Clinical Practice
Moderate and Deep Sedation in Clinical Practice

Edited by

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To my patients, who are the ultimate beneficiaries of this work

To my colleagues from nursing, multiple medical specialties, and administration for their invaluable editorial input and collaboration

To my parents and my wife Zina Matlyuk-Urman, MD, for their encouragement and support

Richard D. Urman

To my mother Florence Feldman, who has never given up in her efforts to make a good life for her children and whose kindness and love I can never adequately repay

To my father Joel Kaye, for providing me with thousands of enlightening lessons in life and for helping to shape me into the man I am today

To my stepparents Gideon Feldman and Andrea Bennett-Kaye, who helped raise me, providing love, support, and wisdom over the last 30+ years

To my wife Kim Kaye, MD, and my children Aaron and Rachel Kaye, for making each day worth living

Alan D. Kaye
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Foreword

In the last decade, the role of the healthcare provider has changed with the evolution of sedation practices. Today, sedation is being administered by a variety of caregivers in many different settings. An increasing number of procedures are being performed under moderate (formerly known as “conscious”) and deep sedation in both the inpatient and outpatient arenas. For the healthcare practitioner, it is critical to have knowledge of pharmacology, monitoring, and regulatory requirements, as well as of local and national policies related to the administration of sedation. The healthcare practitioner must be able to provide sedation safely in the appropriate setting and for appropriately selected patients and procedures, in order to have the desired clinical outcomes and improved patient and proceduralist satisfaction. Today, a variety of healthcare professionals are involved in sedation: nurses, physician assistants, non-anesthesia physicians, and anesthesia professionals. This book is a must-have guide to help you understand your role and what is expected of you. As an administrator I highly recommend this book as an invaluable A-to-Z reference guide for setting up and running a successful sedation program. This book contains up-to-date information on education and credentialing, competency assessment, monitoring needs, pain management, and emergency resuscitation for a variety of sedation areas: radiology, endoscopy, cardiology, emergency department, intensive care, ambulatory centers and offices, among others. Since regulatory requirements and guidelines are constantly in flux, this book includes the latest expectations from The Joint Commission, and many general and specialty-specific guidelines that affect sedation practice are conveniently listed in the Guidelines and Standards chapter.

Drs. Urman and Kaye have done an amazing job, drawing upon their many years of anesthesia and sedation experience to provide the reader with the latest evidence-based, practical knowledge of the various aspects of sedation practice. The book starts by defining sedation levels and helping you select and evaluate patients. The editors have made it easy to understand the different components needed to provide sedation safely. Pharmacology, regulatory parameters, quality management, legal considerations, and documentation tips are discussed. Information is provided on all spectrums, from pediatric to geriatric, and covering emergency department, medical-surgical, intensive care, and outpatient settings.

Having worked in the healthcare industry for over 35 years in critical care and medical-surgical units, and as an administrator in hospital inpatient and outpatient settings, I believe this is the most complete resource available. This book has contributions from many nationally known individuals who are experts in their respective fields. I hope that their experience and commitment to our patients will make a difference in your practice, and that this book will help to bring the level of knowledge and competency of your staff to a higher level.

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Preface

With the tremendous growth of procedures being performed under moderate (formerly known as “conscious”) and deep sedation, it is essential for all physicians, nurses, physician assistants, and other healthcare providers and administrators to develop appropriate policies and educational programs to provide safe patient care. Because guidelines and regulations put forth by many professional societies, The Joint Commission (TJC), and the Centers for Medicare and Medicaid (CMS) are constantly evolving, it is important to stay current and well-informed.

Procedures performed under moderate and deep sedation are increasing in complexity and duration, and many patients present with significant existing medical problems. A vast majority of these procedures are performed outside of the operating room in both inpatient and outpatient settings. Consequently, non-anesthesia providers are becoming more involved in the supervision and administration of moderate and deep sedation.

Our intention was to compile a practical, comprehensive, up-to-date handbook that can be used to set up and maintain a safe moderate/deep sedation program in your healthcare facility. We cover all essential topics such as definitions of sedation levels, patient evaluation and recovery, pharmacology, monitoring and equipment, legal and patient safety issues, controversies, and emergency resuscitation. We discuss specific clinical and administrative aspects for the nursing and physician assistant staff. The handbook describes special considerations for unique patient populations such as pediatrics, the elderly, and patients with significant medical problems. Finally, we cover topics related to the procedures performed in the endoscopy, cardiology, and radiology suites, the intensive care unit, the emergency department, the dental practice, and the infertility clinic. Our chapter contributors constitute many national experts in their respective fields.

We hope that you find this handbook an invaluable resource, whether you are a clinician or an administrator.

Richard D. Urman, MD, MBA
Alan D. Kaye, MD, PhD
Guidelines and standards

Richard D. Urman

American Academy of Pediatrics (AAP) and American Academy of Pediatric Dentistry (AAPD)

American Association of Critical-Care Nurses (AACN)

American Association of Nurse Anesthetists (AANA)

American Association of Oral and Maxillofacial Surgeons (AAOMS)

American College of Cardiology (ACC) and American Heart Association (AHA)

American College of Emergency Physicians (ACEP)

**American College of Radiology (ACR) and Society of Interventional Radiology (SIR)**

**American Dental Association (ADA)**

**American Nurses Association (ANA)**

**American Society for Gastrointestinal Endoscopy (ASGE)**

**American Society of Anesthesiologists (ASA)**


**Association of periOperative Registered Nurses (AORN)**


Position statement on one perioperative registered nurse circulator dedicated to every patient undergoing a surgical or other invasive procedure (2007). Available online at www.aorn.org/PracticeResources/AORNPositionStatements/Position_RegisteredNurseCirculator.


**Centers for Medicare and Medicaid Services (CMS)**


Society of Critical Care Medicine (SCCM)

The Joint Commission

University HealthSystem Consortium (UHC)