

# Smith's Anesthesia for Infants and Children, 10th Edition

Edited by Peter J. Davis, M.D., and Franklyn P. Cladis, M.D., F.A.A.P. Philadelphia, Elsevier, 2022. Pages: 1,561. ISBN-13: 978-0323698252. Price: \$259.99 (Hardcover with accompanying eBook; Elsevier); \$215.99 (Hardcover with accompanying eBook; Amazon); \$207.99 (eBook only; Elsevier).

*Smith's Anesthesia for Infants and Children* is regarded by many as one of the classic textbooks of pediatric anesthesia. Dr. Robert M. Smith, a distinguished clinician and scholar and former Chief of Anesthesia at the Children's Hospital in Boston, wrote the first edition of the book in 1959. From a modest 400-page text, the 10th edition of this classic has grown into a 1,500-page multiplatform reference with 156 contributors. Lead editors Peter J. Davis and Franklyn P. Cladis have done remarkable work in preserving Dr. Smith's vision. This edition is truly an homage to his legacy.

In this age of instant information, the role of traditional textbooks is often contested. However, reference texts can remain eminent and relevant if they continuously innovate to changing technology and learning styles. The new 10th edition of *Smith's Anesthesia for Infants and Children* is timely, up-to-date, and ingenious, coming just 4 yr after the last edition. An enhanced eBook version is included with the purchase of the hardcover. The eBook can also be purchased without the printed version through the Elsevier Expert Consult Inking Platform.

The 10th edition carries over the basic structure from the previous edition. Content is better organized than ever before and divided into eight main parts. Pain management gets its own well-deserved updated section. The chapter on regional anesthesia has been expanded with new graphics. The last section of the book brings together special topics like medical ethics and patient safety. The section on the history of pediatric anesthesia is enlightening and gratifying.

The book adopts a conventional and instructive approach to presenting information. The first two parts are dedicated exclusively to comparative anatomy and physiology, behavioral development, fluid management, and clinical pharmacology. The material presented is detailed and refined. Basic science topics can come across as dull and unexciting to read, but I don't see them as redundant. The authors have made an earnest effort to highlight differences vis-à-vis adults based on available evidence. The chapter on thermoregulation is both concise and relatable to clinical practice. Similarly, the chapter on behavioral development includes a plethora of graphics and photos highlighting growth and developmental metrics. It was refreshing to see updated chapters on inhalation anesthetics, opioids, and muscle relaxants. Commentary on newer drugs like sugammadex is adequate and clinically pertinent.

Airway management is a fundamental aspect of anesthesia. A dedicated chapter on normal and difficult pediatric airway management is a welcome addition. Clinical aspects of normal airway management were conspicuous by their absence in previous editions. The information was dispersed across various sections of the book and not easy to collate. The new chapter is well written and covers the most essential elements. Video laryngoscopy gets its due place under management techniques.

Contemporary practice of pediatric anesthesia demands in-depth knowledge of neonatal medicine and pediatric critical care. Pediatric anesthesiologists routinely find themselves tasked with providing anesthetic care to smaller and younger neonates. The editors appreciate this knowledge gap and have rightfully dedicated almost 100 pages of this textbook to comprehensive understanding of neonatology for anesthesiologists. One of the positive changes I noticed in this edition is an attempt to incorporate topics that would generally have fallen under the domain of general pediatric medicine.

Parts V, VI, and VII of this textbook are dedicated to clinical management. Chapters in Part V are organized by surgical subspecialties, whereas Part VI is organized by organ systems and associated disorders. Part VII is dedicated to pediatric critical care for anesthesiologists. Pediatric cardiopulmonary resuscitation gets a comprehensive review. Pediatric anesthesiologists practicing in North America will relate quite easily to anesthetic management techniques and pearls described in Parts V, VI, and VII. I could find information on most pediatric surgical case scenarios likely to be encountered in primary and tertiary pediatric anesthesia practice. Most narratives are very detailed, giving useful practical guidance. As an example, the section on adenotonsillectomy and obstructive sleep apnea is impressive. In the same chapter, however, anesthetic management of choanal atresia is brief and may not provide sufficient instruction to a novice practitioner. Color information boxes summarizing perioperative management are informative. Perhaps practical perioperative management guidance standardized along the lines found in *Anesthesiologist's Manual of Surgical Procedures* (6th edition, edited by Jaffe R.A., Schmiesing C.A., Golianu B., Wolters Kluwer, 2020) can be considered in future editions. Having said that, reference textbooks such as Smith's are not intended to be

a substitute for supervised hands-on clinical experience and mentoring.

The accompanying eBook version is available on the Elsevier Inkling multimedia platform. It is quite intuitive and easy to navigate. The interface is clean, simple, and visually appealing. Mobile and tablet versions of the app are available to download on iOS and Android platforms. The online accompanying video library is extensive, covering a wide range of topics. A sizeable percentage is dedicated to ultrasound-guided regional anesthesia techniques and congenital heart disease. It was illuminating to see new content added on practical aspects of pediatric anesthesia such as videos on airway management, sleep endoscopy, single-lung ventilation techniques, and video laryngoscopy. Like the previous edition, the eBook includes updated multiple-choice questions with answers and explanations. References used in the text are only available in the online version.

Like any other reference textbook, some chapters are better written than others. With more than 150 contributing authors, this is quite inevitable. Nonetheless, I feel that the 10th edition of this modern classic is a definitive step up from the previous edition. The text covers the subject matter

in extraordinary depth and scale. Existing content has been logically reorganized and thoroughly revised. New chapters reflect new advances and improve on the deficiencies of past editions. The addition of new color graphics and imagery enhances the overall readability and presentation of the book. The lead authors show mature understanding of changing times, learning styles, and technology. The book will appeal to all categories of learners. For the advanced practitioner, the 10th edition of *Smith's Anesthesia for Infants and Children* provides a solid repository of up-to-date peer-reviewed subject matter, whereas the budding pediatric anesthesiologist will find this an invaluable and dependable reference covering all aspects of perioperative pediatric anesthesia practice.

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