

Preface

Pediatric Anesthesiology



Andrew T. Costarino, Jr, MD



B. Randall Brenn, MD

Guest Editors

The subspecialty of pediatric anesthesiology is changing in response to influences that come from within and without the discipline, but at its core are the unique needs of the population we serve that relate to the inevitable vector of human growth and development. Advances and experience with anesthetic agents and techniques, influences that come from advances in surgical practice, medical treatments, imaging technology, changing trends in disease epidemiology, adaptations from adult anesthesiology practice, pressure to comply with regulatory requirements, and our desire to meet the changing expectations of patients and their families all contribute to what pediatric anesthesiology is today. Looking in the rearview mirror to how we got to current practice and projecting forward to what needs are still unmet puts today's practice in context. Therefore, in this issue of the *Anesthesiology Clinics of North America*, we have gathered a series of articles that highlight recent advances in the specialty that we think characterize much of what pediatric anesthesiology is today. We have tucked these between the bookends of a historical perspective of our subspecialty and musings on its future.

We feel the topics demonstrate the breadth and depth of Pediatric Anesthesia and its evolution. Advances in knowledge are reflected in the articles on preoperative psychological preparation, the genetics of malignant hyperthermia, and opioid use in the pediatric population. Pediatric cardiac anesthesia and the

anesthesia for solid organ transplantation have also benefited from a broadened knowledge base and shared experience. New technology and techniques can be found in the articles on anesthesia ventilators and single lung ventilation. Similarly, technology that existed merely on the fringes a few years ago is considered state-of-the-art for spinal cord monitoring in pediatric spinal fusion patients today. Advances in acute pain management and regional techniques demonstrate a refinement of accepted techniques with adaptation to our pediatric population.

Practitioners of pediatric anesthesia cannot ignore certain trends, such as the increasing prevalence of chronic diseases (eg, obesity and cerebral palsy). Nor can we escape the increasing requests for our services in the arena of pediatric sedation for minor procedures and diagnostic studies. Sometimes advances in health care are not enough to ease pain and suffering or prolong the lives of the youngest of our patients. The experiences and successes of end-of-life issues common to elderly patients are now being used to benefit our pediatric patients and their families.

Our goal in this issue of the *Anesthesiology Clinics of North America* is to provide a well-rounded view of recent trends in the specialty of pediatric anesthesiology. We wish to thank the contributing authors and Elsevier for helping us with this effort. We hope that readers will agree that our goal has been achieved.

Andrew T. Costarino, Jr, MD
Jefferson Medical College
1025 Walnut Street
Philadelphia, PA 19107, USA

Alfred I. duPont Hospital for Children
1600 Rockland Road
PO Box 269
Wilmington, DE 19899, USA
E-mail address: acostari@nemours.org

B. Randall Brenn, MD
Alfred I. duPont Hospital for Children
1600 Rockland Road
PO Box 269
Wilmington, DE 19899, USA
E-mail address: brbrenn@nemours.org