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Pediatric Surgery

General Principles and
Newborn Surgery

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General Principles and Newborn
Surgery

With 487 Figures and 114 Tables

 Springer

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ISBN 978-3-662-43587-8 ISBN 978-3-662-43588-5 (eBook)
ISBN 978-3-662-43589-2 (print and electronic bundle)
<https://doi.org/10.1007/978-3-662-43588-5>

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The registered company address is: Heidelberger Platz 3, 14197 Berlin, Germany

To my brother, Kailash, for his love, support, and inspiration throughout my life and career.

Preface

During the past two decades, major advances in prenatal diagnosis, imaging, anesthesia, and intensive care, as well as the introduction of new surgical techniques including minimally invasive surgery and robotic technology, have radically altered the management of newborns, infants, and children with surgical conditions. In recent years, important basic science advances in the fields of regenerative medicine and tissue engineering, pharmacotherapy, genetics, immunology, embryology, and developmental biology offer hope of the translation of basic science discoveries to new clinical therapies for children in the future.

Pediatric Surgery provides an authoritative, comprehensive, and up-to-date international reference on the surgical management of both common and rare diseases in infants and children, written by the world's foremost experts. The vast amount of information included in *Pediatric Surgery* is divided into three volumes, to be published separately: *General Principles and Newborn Surgery*; *General Pediatric Surgery, Tumors, Trauma and Transplantation*; and *Pediatric Urology*. There are three different publication formats of the reference works: (1) printed book, (2) a static e-version on SpringerLink that mirrors the printed book, and (3) a living reference also on SpringerLink that is constantly updateable, allowing the reader to rapidly find up-to-date information on a specific topic. Each chapter is organized in the form of a well-defined and structured review of the topic that allows readers to search and find information easily.

General Principles and Newborn Surgery has 85 chapters focusing on general principles and newborn surgery. The first 38 chapters are devoted to general principles including important topics such as fetal counseling for congenital malformations, surgical safety in children, innovations in minimally invasive surgery, fast-track pediatric surgery, ethical considerations in pediatric surgery, childhood obesity, surgical problems of children with physical disabilities, clinical research and evidence-based pediatric surgery, tissue engineering and stem cell research, patient- and family-oriented pediatric surgical care, and surgical implications of human immunodeficiency virus infection in children. The remaining 47 chapters in *General Principles and Newborn Surgery* are devoted to the management of congenital malformations in the newborn, each chapter providing a step-by-step detailed practical guide on the operative approach including high-quality color illustrations to clarify and simplify various operative techniques.

My hope is that *Pediatric Surgery* will act as a reference book for the management of childhood surgical disorders, providing information and guidance to pediatric surgeons, pediatric urologists, neonatologists, pediatricians, and all those seeking more detailed information on surgical conditions in infants and children.

I wish to thank most sincerely all the contributors from around the world for their outstanding work in the preparation of this innovative international reference book on the management of surgical conditions in infants and children. I also wish to express my gratitude to Dr. Julia Zimmer, Dr. Hiroki Nakamura, and Dr. Anne Marie O'Donnell for their help in the preparation of this book. I wish to thank the editorial staff of Springer, particularly Ms. Audrey Wong-Hillmann and Ms. Nivedita Baroi, for all their help during the preparation, production, and publication of this important reference book.

Dublin, Ireland
January 2020

Prem Puri

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