Essentials of Anesthesia for Neurotrauma, 1st ed

Neurotrauma is a significant cause of disability and mortality in the United States and worldwide. Provision of timely, safe anesthetic and surgical care has a positive impact on outcomes and is a necessary part of the education of all anesthesia trainees. The first edition of Essentials of Anesthesia for Neurotrauma, edited by Hemanshu Prabhakar, Charu Mahajan, and Indu Kapoor, provides a comprehensive overview of all aspects of management for the anesthesiologist taking care of patients with neurotrauma. The editors are all on faculty at the All India Institute of Medical Sciences in New Delhi, India, and have collaborated before on other neuroanesthesia texts, such as Coexisting Diseases and Neuroanesthesia, and the Manual of Neuroanesthesia. Hemanshu Prabhakar is a professor in neuroanesthesiology and critical care and has published several other texts on neuroanesthesia including Paediatric Neuroanesthesia, Neurointensive Care, Textbook of Neuroanesthesia and Neurocritical Care, and Complications in Neuroanesthesia.

The book is divided into 46 chapters over 16 sections encompassing all phases of care from preanesthetic evaluation and neurouromonitoring to pregnancy and neurotrauma, as well as palliative care. Moreover, this solid, hardcover text is organized in such a way that it is ideal for a student to reference specific aspects of the complex care involving the patient suffering from neurotrauma. Each chapter reads as a standalone section that may be consulted separately, which is advantageous as a quick reference.

Initially, the book focuses on anatomy and physiology, providing a reasonable basic overview. While these sections would benefit from more figures and tables to illustrate the fundamental concepts, it concisely presents the framework from which the subsequent sections may be understood. It then transitions to the preanesthetic evaluation and neurosurgical care giving an overview of indications for specific interventions and implications for outcomes. This is particularly useful for the anesthesiologist in understanding their role and how they can help facilitate improved outcomes. The book then briefly touches on neurouromonitoring and neuroradiology, important topics for the comprehensive management of neurotrauma. The section on neurointensive care looks at all aspects of the perioperative care of the neurotrauma patient, from sedation and hemodynamic management to nutrition and posttraumatic cognitive dysfunction. While some may consider this to be outside the scope of anesthesia management, understanding these concepts will help inform perioperative optimization and improve intraoperative care.

The book has an impressive array of international collaborators that allow for a comprehensive world view on the current understanding of management of neurotrauma. This unfortunately comes with some discrepancies in opinions on various aspects of care, and interchange units of measure may be confusing for the reader; however, it is also a reflection of current knowledge worldwide. In addition, as the book is likely to be intermittently referenced, it would benefit from a comprehensive list of all utilized abbreviations, as there are many, and the reader, if unfamiliar with all the abbreviations, may have to read more than the referenced section to determine the meaning of the abbreviation. Attempts to address sensitive communication issues, such as differences in cultural expectations and who on the team should provide information to families, are also touched on. Sections on special considerations, such as pediatric and geriatric neurotrauma, as well as pregnancy and neurotrauma, are particularly helpful to both students and seasoned practitioners. The authors even tackle difficult topics such as palliative care and brain death, as well as having an entire section on clinical procedures relevant to neurotrauma.

Overall, this is a useful text, the first that focuses specifically on neurotrauma since Abrams and Grande published Trauma Anesthesia and Critical Care of Neurologic Injury in 1977. While covering a significant breadth of information, it does not go into too much depth on any 1 topic, making this an ideal reference for the student of neurotrauma. It is a particularly useful reference for those looking for a single resource to consult. In summary, this book provides an organized overview, performing well as the student’s single resource on neurotrauma.

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DOI: 10.1213/ANE.0000000000003980