



Gupta and Gelb's Essentials of Neuroanesthesia and Neurointensive Care, Second Edition

Arun Gupta, Adrian Gelb, Derek Duane, Ram Adapa (Editors). Cambridge University Press 2018. ISBN: 9781316556801, ISBN-10: 1316602524. Available as e-book, <https://doi.org/10.1017/9781316556801>

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Received: 21 August 2019/Revised: 21 October 2019/Accepted: 25 October 2019/Published online: 6 November 2019
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Caring for patients with nervous system pathophysiology can be extremely challenging and complex. The workup, diagnosis, medical management, and rehabilitation often involve highly sub-specialized teams of healthcare providers who must stay abreast of the latest innovations in this rapidly evolving field. In this context, the much-awaited, updated, second edition of *Gupta and Gelb's Essentials of Neuroanesthesia and Neurointensive Care*, which follows the first edition released in 2008, is a boon for those training or working in this area. The book's editors are internationally recognized experts in the fields of neuroanesthesia and critical care. Drs. Arun Gupta, Derek Duane, and Ram Adapa are consultants at Addenbrooke's Hospital, Cambridge University, UK, and Dr. Adrian Gelb is a Distinguished Professor of Anesthesia at the University of California, San Francisco (USA). They have assembled an impressive team of 79 contributing authors who hail from Canada, United States, France, The Netherlands, Singapore, and United Kingdom and who provide a broad, international perspective on a wide range of subjects.

At 415 pages, the book is divided into seven sections and 55 chapters. The first ten chapters deal with the basic sciences: Section 1: Anatomy (2 chapters); Section 2: Physiology (5 chapters); Section 3: Pharmacology (3 chapters). Section 4, which includes 21 chapters pertaining to neuroanesthesia, reviews a wide range of surgical procedures and perioperative concerns for

both adult and pediatric patients. Section 5 consists of 13 chapters devoted to neurointensive care, including a chapter on brain death. Section 6 includes seven chapters devoted to monitoring, with emphasis on the neuromonitoring that may be used in the operating room and intensive care unit. Section 7, titled Miscellaneous, has four chapters that deal with pregnancy, rehabilitation, clinical information resources (including PubMed and other electronic databases), and case scenarios. The chapters are relatively short (fewer than 15 pages), each beginning with defined key points and abbreviations and using bullet points to emphasize important concepts. Liberal use is made of diagrams and tables to help the reader understand the issues at hand. At the end of each chapter, a short list of references is provided for readers seeking additional information.

Despite its multi-authored nature, the book has a remarkably even, consistent flow with little overlap, for which the Editors are to be commended. The writing is concise and easy to understand without appearing overly dry or dogmatic. The diagrams and tables, of superior quality, serve as wonderful learning aids to reinforce important concepts. Common misconceptions are addressed throughout the text - for example, that cerebral autoregulation achieves adequate blood flow over a systemic arterial pressure range of 50-150 mmHg, when, in fact, higher pressures are often required. I particularly enjoyed the chapters pertaining to anesthesia for carotid endarterectomy and interventional neuroradiology, respectively, and the case scenarios for their elucidation of important clinical concepts.

The book is available in paperback and online e-book format. In the paperback, the print is excellent, and the glossy pages work well on which to make notations or for

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using marking pens, as preferred by the reader. In addition, its small size makes it quite portable. With the e-book format, each section allows independent navigation that permits easy access to topics of interest. It was easy to access the e-book through multiple interfaces, including a laptop, iPad, and Android phone. In a future edition, the editors may wish to update some of the references provided at the end of each chapter. In addition, the basic science section might benefit from a few “tweaks”, with more colored pictures and diagrams.

This second edition of *Gupta and Gelb’s Essentials of Neuroanesthesia and Neurointensive Care* offers an accessible, easy-to-read review that focuses on the clinical setting. It admirably condenses relevant, important information to provide an overview of the material required by neuroanesthesia and neurointensive care practitioners. The book is ideally suited for trainees - be they students, residents, or fellows - involved in

providing neuroanesthesia or neurointensive care. Although the book would also be useful for experienced health care practitioners who would like an easily-obtained “refresher” update, it does not replace an exhaustively referenced tome (e.g., *Cottrell and Patel’s Neuroanesthesia*). At CAD 91.95, the book is reasonably priced to fit most budgets. I thoroughly enjoyed reading it from cover to cover and would unhesitatingly recommend it for everyone practising neuroanesthesia and neurointensive care in whatever capacity.

Conflicts of interest None.

Funding statement None.

Editorial responsibility This submission was handled by Dr. Steven Backman, Associate Editor, *Canadian Journal of Anesthesia*.

Publisher’s Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.