
Contents

Part I Fundamentals

- 1 Geriatric Anesthesiology: Where Have We Been and Where Are We Going? . . . 3**
Julie R. McSwain, J.G. Reves, Sheila Ryan Barnett, and G. Alec Rooke
- 2 Theories and Mechanisms of Aging 19**
Neal S. Fedarko
- 3 Ethical and Legal Issues of Geriatrics 27**
Paul J. Hoehner
- 4 Basic Preoperative Evaluation and Preoperative Management
of the Older Patient. 53**
Linda Liu and Jacqueline M. Leung
- 5 The Perioperative Surgical Home for the Geriatric Population. 67**
Gary E. Loyd and Anahat Dhillon
- 6 Improving Perioperative Functional Capacity: A Case for Prehabilitation 73**
Francesco Carli and Guillaume Bousquet-Dion
- 7 Care of the Geriatric Surgery Patient: The Surgeon's Perspective 85**
Melissa A. Hornor, James D. McDonald, Daniel A. Anaya,
and Ronnie Ann Rosenthal
- 8 The Geriatrician's Perspective on Surgery in the Geriatric Population 99**
Thuan Ong, Joe C. Huang, Carol A. Crawford, and Katherine A. Bennett
- 9 Medicare, Administrative, and Financial Matters in Caring
for Geriatric Patients 117**
Laura Tarlow

Part II System Changes

- 10 Geriatric Anesthesia: Age-Dependent Changes in the Central
and Peripheral Nervous Systems. 145**
Anushree Doshi, Roberto Cabeza, and Miles Berger
- 11 Cardiovascular System. 161**
Shamsuddin Akhtar and Thomas J. Ebert
- 12 The Aging Respiratory System: Strategies to Minimize Postoperative
Pulmonary Complications 179**
Ana Fernandez-Bustamante, Juraj Sprung, Rodrigo Cartin-Ceba,
Toby N. Weingarten, and David O. Warner
- 13 Renal, Metabolic, and Endocrine Aging. 197**
Sonalee Shah and Michael C. Lewis

14 Musculoskeletal and Integumentary Systems	203
Itay Bentov and May J. Reed	
15 Perioperative Thermoregulation in the Elderly	213
Daniel I. Sessler	
Part III Pharmacology	
16 Inhalational Anesthetics	233
Gary R. Haynes	
17 Intravenous Sedatives and Anesthetics	255
Tracy Jobin McGrane, Matthew D. McEvoy, and J.G. Reves	
18 The Pharmacology of Intravenous Opioids	283
Stephanie Whitener, Matthew D. McEvoy, Steven L. Shafer, and Pamela Flood	
19 Local Anesthetics and Regional Anesthesia	303
Sylvia H. Wilson and Michael Anderson	
20 Neuromuscular Blocking and Reversal Agents	321
Cynthia A. Lien	
21 Anesthetic Implications of Chronic Medication Use	333
R. David Warters and Tamas A. Szabo	
Part IV Special Concerns	
22 Anesthesia for Common Nonoperating Room Procedures in the Geriatric Patient	353
George A. Dumas, Julie R. McSwain, and Sheila Ryan Barnett	
23 Cardiothoracic and Vascular Procedures	373
Timothy L. Heinke and James H. Abernathy III	
24 Perioperative Management of Pacemakers and Internal Cardioverter-Defibrillators	381
G. Alec Rooke	
25 Special Concerns of Intraoperative Management in Orthopedic Procedures ..	395
John P. Williams, Catalin Ezaru, and Lynn Cintron	
26 Geriatric Trauma and Emergent/Urgent Surgery	413
George Joseph Guldán III	
27 Perioperative Care of the Elderly Cancer Patient	425
B. Bryce Speer and Vijaya Gottumukkala	
Part V Postoperative Care	
28 Pain Management	435
Jack M. Berger and Rodney K. McKeever	
29 ICU Management	453
Ronald Pauldine	
30 Postoperative Cognitive Impairment in Elderly Patients	467
Michelle Humeidan, Stacie G. Deiner, and Nicholas Koenig	
31 Palliative Care for the Anesthesia Provider	481
Allen N. Gustin Jr.	
Index	493

Geriatric Anesthesiology

Reves, J.G.; Barnett, S.R.; McSwain, J.; Rooke, G.A. (Eds.)

2018, XX, 510 p. 131 illus., 35 illus. in color., Hardcover

ISBN: 978-3-319-66877-2