

1. Record Nr.	UNINA9910254481503321
Titolo	Total Intravenous Anesthesia and Target Controlled Infusions [[electronic resource] ] : A Comprehensive Global Anthology // edited by Anthony R. Absalom, Keira P. Mason
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2017
Edizione	[1st ed. 2017.]
Descrizione fisica	1 online resource (XVIII, 824 p. 324 illus., 200 illus. in color.)
Disciplina	617.96
Soggetti	Anesthesiology Traumatology Traumatic Surgery
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	PART 1. INTRODUCTION/BACKGROUND -- 1. When and How Did It All Begin? A Brief History of Intravenous Anesthesia -- 2. The Development and Regulation of Commercial Devices for Target - Controlled Drug Infusion -- 3. The Memory Labyrinth: systems, processes and boundaries -- 4. Consciousness and Anaesthesia -- 5. Mechanisms of Intravenous Anaesthetic Action -- PART 2. PRINCIPLES OF PHARMACOLOGICAL MODELING -- 6. Basic Pharmacology: Kinetics and Dynamics for Dummies -- 7. Pharmacokinetic-Pharmacodynamic Modelling of Anesthetic Drugs -- 8. Principles of Target Controlled Infusions -- 9. Performance of Target-Controlled Infusion Systems -- 10. How to Select a PK/PD Model -- PART 3. PHARMACOLOGY OF THE INTRAVENOUS ANESTHETIC AGENTS -- 11. Propofol PK-PD -- 12. Etomidate and Etomidate Analogues: Molecular Pharmacology and Behavioral Actions -- 13. Dexmedetomidine: The Science and Clinical Aspects in Adults and Children -- 14. Clinical Effects and Applications of Ketamine -- 15. Neuromuscular Blocking Drugs: Pharmacology, Physiology and Clinical Aspects -- 16. New and Upcoming Drugs: Intravenous Anesthetic Agents -- 17. Drug Interactions in Anesthesia -- PART 4. PRACTICAL CONDUCT OF SEDATION AND ANESTHESIA 18. Pumps Pitfalls and Practicalities -- 19. EEG Monitoring of Depth of

Anesthesia -- 20. Monitoring the analgesic component of anesthesia -- 21. Intravenous Drugs for Sedation: Target Controlled, Patient Controlled, and Patient Maintained Delivery -- 22. Pediatric TIVA/TCI: Case Presentations and Discussion -- 23. TCI/TIVA Adult Case Studies -- PART 5. SPECIAL POPULATIONS AND PROCEDURES -- 24. Intravenous Anesthesia in Obese Patients -- 25. Pharmacokinetics and Dynamics on the Pediatric Population -- 26. Clinical Pharmacology of Intravenous Sedation in Children -- 27. Sedation of the Critically Ill Child -- 28. TCI & TIVA for Neurosurgery: Considerations and Techniques -- 29. TCI in Special Patients Groups: The Elderly and Obese -- 30. TIVA for Cardiac Surgery -- 31. TIVA/TCI in Veterinary Practice -- PART 6. OUTCOME, EDUCATION, SAFETY, AND THE FUTURE -- 32. Advantages, Disadvantages, and Risks of TIVA/TCI -- 33. Economics of TIVA -- 34. Teaching TCI with Human Patient Simulators -- 35. Closed-Loop or Automated Titration of Intravenous Anesthesia: Background, Science and Clinical Impact -- 36. Health Care Technology, the Human-Machine Interface, and Patient Safety During Intravenous Anesthesia -- 37. Can IV Sedatives Affect Outcome? -- 38. The Benefit and Future of Pharmacogenetics -- 39. Lessons from drug interaction displays -- 40. The Role of Intravenous Agents in Delirium -- 41. Perioperative Cardioprotective Strategies in Noncardiac Surgery -- 42. Opioid Induced Hyperalgesia after Surgery: Clinical Relevance -- 43. Memory, Awareness and Intravenous Anaesthetics -- 44. Awareness and Dreaming During TIVA -- 45. Apoptosis and Neurocognitive Effects of Intravenous Anesthetics -- Epilogues.

---

#### Sommario/riassunto

This is a comprehensive and authoritative presentation of total intravenous anesthesia (TIVA) and target controlled infusion (TCI). The editors' international reputation has enabled them to recruit leading experts from around the world to write single-author chapters in their area of expertise. Total Intravenous Anesthesia and Target Controlled Infusions is the first multi-disciplinary, globally authored volume on the topic. Providing a single source of information on all aspects of TIVA and TCI, from pharmacologic modeling and the pharmacology of intravenous anesthetic drugs to practical considerations in the clinical setting and the requirements of special populations, Total Intravenous Anesthesia and Target Controlled Infusions examines the debate about the risks and advantages of TIVA, analyze outcome studies, and provides guidance on creating a curriculum to teach TIVA and TCI.

---