Technological advances in surgery, trauma and critical care

Rifat - Latifi, Peter M Rhee, Rainer W G Gruessner

Surgery

Research output: Book/Report › Book

Abstract

This text is designed to provide a comprehensive and state-of-the-art overview of the major issues specific to technological advances in the fields of trauma, critical care, and many aspects of surgical science and practice. Care of these patients and clinical conditions can be quite complex, and materials have been collected from the most current, evidence-based resources. The sections of the text have been structured to review the overall scope of issues dealing with trauma, critical care, and surgery, including cardiothoracic surgery, vascular surgery, urology, gynecology, and obstetrics, fetal surgery, and orthopedics. This volume represents the most comprehensive textbook covering a wide range of topics and technological advances including genomics and nanotechnologies that affect patients' care and surgeons' practice daily. The multidisciplinary authorship includes experts from all aspects of trauma, surgery, and critical care. The volume highlights the dramatic changes in the field including hand-held devices and smart phones used in daily medical and surgical practice, complex computers in the critical care units around the world, and robotics performing complex surgical procedures and tissue engineering. Technological Advances in Surgery, Trauma, and Critical Care provides a comprehensive, state-of-the-art review of this field, and will serve as a valuable resource for clinicians, surgeons, and researchers with an interest in trauma, critical care, and all the specialties of surgery. It provides a concise yet comprehensive summary of the current status of the field that will help guide patient management and stimulate investigative efforts.

ASJC Scopus subject areas

- Medicine (all)

Access to Document

10.1007/978-1-4939-2671-8
Following a fellowship in trauma and surgical critical care at the University of Tennessee - Memphis, she spent eight years on the faculty at Loyola University Medical Center in Illinois prior to returning to Yale in 2006. Dr. Davis received her MBA from the Yale School of Management Leadership in Healthcare program in 2012. She is an Associate Editor of Trauma Surgery and Acute Care Open, serves on the editorial boards of the Journal of Trauma and Acute Care Surgery, the Journal of Burn Care and Rehabilitation, and Current Trauma Reports, and is an ad hoc reviewer for 10 other critical care and surgical journals. Most Popular. Most Viewed. Most Emailed.

Genomics in Surgery, Trauma, and Critical Care: How Do We Control the Future? Matthew J. Delano, Ronald V. Maier. Published: 1 January 2015. by Springer Science and Business Media LLC. in Technological Advances in Surgery, Trauma and Critical Care. Technological Advances in Surgery, Trauma and Critical Care pp 19-33; doi:10.1007/978-1-4939-2671-8_3. Show/hide abstract. The publisher has not yet granted permission to display this abstract. The surgical critical care service provides consultative services for surgical patients in the intensive care units, giving experience in hemodynamic monitoring, ventilator management, nutritional support, sepsis, and organ failure. The section is actively involved in cardiac, hemorrhagic and septic shock research, investigation of L-arginine metabolism after trauma, and lymphatic function in shock states. Specialties. Acute care surgery. Gastrointestinal endoscopy. General surgery. Laparoscopic surgery. Nutrition. Surgical critical care. Trauma surgery. Virtual ICU. Providers. The sections of the text have been structured to review the overall scope of issues dealing with trauma, critical care and surgery, including cardiothoracic surgery, vascular surgery, urology, gynecology and obstetrics, fetal surgery and orthopedics. This volume represents the most comprehensive textbook covering a wide range of topics and technological advances including genomics and nanotechnologies that affect patients' care and surgeons' practice daily. The multidisciplinary authorship includes...
experts from all aspects of trauma, surgery and critical care.