Peripherally Inserted Central Venous Catheters - Sergio Sandrucci 2014-07-05
Indications for central venous cannulation in critically ill patients have increased dramatically, but central venous access has the drawbacks of morbidity and a scarcity of experienced operators. Ultrasound-guided peripheral venous access offers a solution, in that it reduces morbidity and can be performed by a dedicated nursing team. The aim of this book is to teach the fundamentals of this emerging technique. Advice is provided on choice of materials; maneuvers for positioning of peripherally inserted central venous catheters (PICCs); techniques for evaluation of PICC tip placement; prevention, diagnosis, and management of complications; and organization of a dedicated team within a hospital or a supportive care program. Legal and economic issues are also considered. The book will be of interest to a wide range of professionals, including nutritionists, oncologists, anesthesiologists, surgeons, registered nurses, nurse practitioners, physicians, physician assistants, and radiologists.

Burn Care for General Surgeons and General Practitioners - David G. Greenhalgh 2016-04-12
This textbook on burn care is focused specifically on the needs of a surgeon. It provides a "how to do" text that presents the practical strategies for initial resuscitation, skin grafting, burn-specific critical care and ultimately guide the surgeon for the best outcomes for the burn surgeon. It provides the reader with basic pathophysiology but avoids a detailed review of the molecular science of burns. Guidelines for basic care with the chapters covering the timeline used for each patient spanning from initial resuscitation (ABCs) to managing their re-socialization are provided. The text covers the key components to the initial management of the burn patient including airway, breathing and circulation. The reader is introduced to the metabolic changes of a major burn and how nutrition and pharmacologic manipulation affects these systemic effects of a burn injury. The management of burn sepsis as well as the basic concepts of wound healing of the different depths and severity of burns are covered. Another chapter covers the basic techniques of skin grafting, rehabilitation and reconstruction with a focus to optimize the cosmetic and functional outcome of the burn. Special chapters cover management of outpatient burns and pediatric injuries. Special burns - electrical, chemical, cold injuries and finally the treatment of other diseases that lead to massive skin loss are covered. Special considerations for pain, scar management, psychosocial recovery, intentional burns, burn prevention and disaster preparation complete the text. Burn Care for General Surgeons and General Practitioners provides a reference for general and plastic surgeons who are planning a career in burns. The textbook will also be a straightforward resource for the general or plastic surgeon who takes care of burns as part of their practice.

Polymeric Systems as Antimicrobial or Antifouling Agents - Antonella Piozzi 2020-05-22
The rapid increase in the emergence of antibiotic-resistant bacterial strains, combined with a dwindling rate of discovery of novel antibiotic molecules, has created an alarming issue worldwide. Although the occurrence of resistance in microbes is a natural process, the overuse of antibiotics is known to increase the rate of resistance evolution. Under antibiotic treatment, susceptible bacteria inevitably die, while resistant microorganisms proliferate under reduced competition. Therefore, the out-of-control use of antibiotics eliminates drug-susceptible species that would naturally limit the expansion of resistant species. In addition, the ability of many microbial species to grow as a biofilm has further complicated the treatment of infections with conventional antibiotics. A number of corrective measures are currently being explored to reverse or slow antibiotic resistance evolution. Among which one of the most promising solutions is the development of polymer-based antimicrobial compounds. In this Special Issue, different polymer systems able to prevent or treat biofilm formation, including cationic polymers, antibacterial peptide-mimetic polymers, polymers or composites able to load and release bioactive molecules, and antifouling polymers able to repel microbes by physical or chemical mechanisms are reported. Their applications in the design and fabrication of medical devices, in food packaging, and as drug carriers is investigated.

Perioperative Assessment of the Maxillofacial Surgery Patient - Elie M. Ferneini 2018-03-09
This book is designed to guide the practitioner in the medical and anesthetic management of the maxillofacial surgery patient, serving as a comprehensive, up-to-date resource that will assist in patient work-up and response to any medical problem. It is divided into four sections that provide an overview of general and basic topics relevant to perioperative assessment, explain the assessment and management of diverse medical issues and co-morbidities, discuss the perioperative, pharmacological, and supportive management of maxillofacial treatment, and identify potential complications and their management. All of the authors have been carefully selected for their expertise in the topics that they discuss. While the book will be especially valuable for oral and maxillofacial surgeons, it will also be highly relevant for multiple other health care providers, including dentists, dental specialists, dental hygienists, otolaryngologists, plastic and reconstructive surgeons, medical residents, nurses, and physician assistants.
Nimble, Focused, Feisty - Sara Roberts 2016-08-16

Leaders have talked about the importance of corporate culture for decades, but the success of iconic companies like GE, Apple, and Google shows how culture is a strategic lever that can be utilized for driving growth, change, and innovation. In this new age of globalization, rapid technology shifts, and constant disruption, the 21st century marketplace is more volatile and uncertain than ever. To thrive, businesses need a new kind of emphasis around culture. Sara Roberts, former CEO and founder of Roberts Golden and a seasoned executive consultant to dozens of Fortune 500 companies and CEOs, sees how flourishing companies—from established market leaders to the surprising upstarts—share three distinct attributes: Nimble: They are much faster and more agile than ordinary organizations; Focused: They use their sense of purpose as a lens to understand and meet the needs of customers and markets; Feisty: They play big and act bold to capitalize on advantages and out-muscle the competition. For successful companies in this new era, culture is not about playing defense but about going on offense. It's purposefully designed, leveraged, and upgraded to drive value and drive growth. In Nimble, Focused, Feisty, Roberts provides not only a look into what these organizations are doing differently but also a blueprint and framework so your company can create a cultural strategy to thrive in the new era.


This book will provide anyone with an interest in the clinic with a basic guide on those things that are not taught during medical school or any other pre-clinical trainings. The line-up of authors was carefully assembled to include experts in all respective fields to give this volume the authority it requires to be a relevant text for many.

Transplant Infections - Per Ljungman 2016-10-03

As the number of patients undergoing hematopoietic or solid organ transplantation increases, a deep understanding of the field of transplant infectious diseases grows increasingly vital. With its extensively revised and updated content, expanded coverage of surgical infections, and the inclusion of a dedicated section on fungal infections, this book is the ultimate guide to advances in the field of transplant infections that are rapidly implemented into practice both in diagnostic technologies, new therapies, new transplant practices, and challenges such as the threat of multiresistant bacteria and the increasing use of transplantation in the developing parts of the world. Written by experts in their fields, this book is the only comprehensive source of cutting-edge information on transplant infections and has been a trusted guide to medical professionals worldwide for nearly two decades. Transplant Infections is of paramount value to infectious disease specialists, transplant physicians, medical students, fellows, residents, and all medical professionals working with surgical patients.

Comprehensive Healthcare Simulation: Pediatrics - Vincent J. Grant 2016-06-15

This is a practical guide to the use of simulation in pediatric training and evaluation, including all subspecialty areas. It covers scenario building, debriefing and feedback, and it discusses the use of simulation for different purposes: education, crisis resource management and interdisciplinary team training, competency assessment, patient safety and systems integration. Readers are introduced to the different simulation modalities and technologies and guided on the use of simulation with a variety of learners, including medical students, residents, practicing pediatricians, and health-related professionals. Separate chapters on each pediatric subspecialty provide practical advice and strategies to allow readers to integrate simulation into existing curriculum. Pediatric subspecialties covered include: General Pediatrics, Pediatric Emergency Medicine and Trauma, Neonatology, Pediatric Critical Care Medicine, Transport Medicine, Pediatric Anesthesia, and Pediatric Surgery amongst many others. Comprehensive Healthcare Simulation PEDIATRICS Edition is a volume in the series, Comprehensive Healthcare Simulation. The series is designed to complement Levine et al., eds., The Comprehensive Textbook of Healthcare Simulation by providing short, focused uses of the volume in a single specialty or on a specific simulation topic, and emphasizing practical considerations and guidance.

Prevention and Control of Infections in Hospitals - Bjørg Marit Andersen 2019-02-25

This volume offers extensive information on preventive and infection surveillance procedures, routines and policies adapted to the optimal infection control level needed to tackle today's microbes in hospital practice. It especially focuses on preventive measures for serious hospital infections. Each chapter includes a practical section that addresses the main aspects of procedures and treatment, and a theoretical section that contains updated documentation that can be used for further study, or to help select infection control measures. Infection control concerns all healthcare professional working directly or indirectly with patients; in diagnosis, treatment, isolation measures, operations, equipment, drugs, cleaning, textiles, transport, porter service, food and water, building and maintenance, etc. Hygiene and environmental control is central to infection prevention for patients, visitors and staff alike. Good hygienic practices, individual infection control, well implemented and frequent environmental cleaning, and a high professional standard of hygiene in the treatment and care of patients, are essential to patient safety and a safe working environment. Addressing this essential topic, this book is intended for doctors, nurses and other healthcare workers, students in health-related subjects, hospital managers and health bureaucrats, as well as patients and their families.
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With advances in technology and medical science, children with previously untreatable and often fatal
diseases specialists. The proposed text will be divided into three principle sections: 1) Basic Principles of

Pediatric Venous Thromboembolism - Brian R. Branchford 2018-12-06
Venous thromboembolism (VTE) occurs less often in children than adults and therefore remains

underrecognized despite increasing in incidence. Due to the risk of mortality, short- and long-term

morbidity, and increased healthcare costs associated with pediatric VTE, this entity merits better
understanding and consideration. With this Research Topic, we aim to highlight some special

considerations of pediatric VTE, namely risk factors and epidemiology, rare types of pediatric thrombosis
and considerations unique to specific clinical patient subgroups, approaches to management and treatment,

and prevention

Challenging Concepts in Critical Care - Christopher Gough 2020-02-03
A case-based guide with expert commentary, Challenging Concepts in Critical Care shows how the experts
approach and deal with real-life clinical scenarios. Each chapter presents a clinically challenging case
complete with a case history, evidence based tips, and up-to-date learning points. To give further insight
into the field, each chapter has commentary from an expert who identifies and explains the key points and
controversies of the case. Practical yet rich in detail, Challenging Concepts in Critical Care is a key title for
anyone preparing for intensive care exams. For each case, key information is highlighted through the use of
boxes to stimulate interest and facilitate learning: ‘Learning points’, ‘Clinical tips’, ‘Evidence base’, and
‘Expert commentary’. With new information on key trials, clinical practise, and evidence based research,
this book is also an invaluable resource for experienced critical care clinicians looking for a concise update
on a wide range of challenging topics in the field. In addition, it is of high value to senior ICU nurses, allied
health professionals, and anyone with an interest in intensive care medicine.

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conditions, such as congenital heart disease, extreme prematurity and pediatric malignancy, are living
longer. While this is a tremendous achievement, pediatric providers are now more commonly facing
challenges in these medical complex children both as a consequence of their underlying disease and the
delivery of medical care. The term healthcare-associated infections (HAIs) encompass both infections that
occur in the hospital and those that occur as a consequence of healthcare exposure and medical complexity
in the outpatient setting. HAIs are associated with substantial morbidity and mortality for the individual
patient as well as seriously taxing the healthcare system as a whole. In studies from the early 2000s, over
11% of all children in pediatric intensive care units develop HAIs and this figure increases substantially if
neonatal intensive care units are considered. While progress has been made in decreasing the rates of HAI
in the hospital, these infections remain a major burden on the medical system. In a study published in 2013,
the annual estimated costs of the five most common HAIs in the United States totaled $9.8 billion. An
estimated 648,000 patients developed HAIs in hospitals within the US in 2011 and children with healthcare-
associated bloodstream infection have a greater than three-fold increased risk of death. While a number of
texts discuss HAIs in the broader context of infectious diseases or pediatric infectious diseases (such as
Mandell’s Principles and Practice of Infectious Diseases or Long and Pickering’s Principles and Practice of
Pediatric Infectious Diseases) no single text specifically focuses on the epidemiology, diagnosis and
management of HAI in children. Many infectious diseases texts are organized based on the microbiology of
infection and from this starting point then discussing the clinical syndromes associated with the organism of
interest. For instance, a chapter on Staphylococcus aureus may contain a brief discussion of the role of S.
aureus in surgical site infections in the wider context of all staphylococcal disease. For clinicians caring
for children at the bedside, however, the clinical syndrome is typically appreciated and intervention
necessary prior to organism identification. We propose a text that details both the general principles
involved in HAIs and infection prevention but also provides a problem oriented approach. Such a text would
be of interest to intensivists, neonatologists, hospitalists, oncologists, infection preventionists and infectious
diseases specialists. The proposed text will be divided into three principle sections: 1) Basic Principles of
Infection Control and Prevention, 2) Major Infectious Syndromes and 3) Infections in Vulnerable Hosts.
Chapters in the Major Infectious Syndromes section will include discussion of the epidemiology,
microbiology, clinical features, diagnosis, medical management (or surgical management as appropriate)
and prevention of the disease entity of interest. Chapters will seek to be evidenced based as much as
possible drawing from the published medical literature as well as from clinical practice guidelines (such as
those from the Infectious Diseases Society of America) when applicable. We intend to include tables,
figures and algorithms as appropriate to assist clinicians in the evaluation and management of these often
complex patients. Finally, we intend to invite authors to participate in this project from across a number of
medical specialties including infectious diseases, infection control, critical care, oncology and surgery to
provide a multidisciplinary understanding of disease. It is our intent to have many chapters be co-written by
individuals in different subspecialties; for instance, a chapter on ventilator-associated pneumonia may be
co-written by both infectious disease and critical care medicine specialists. Such a unique text has the
potential to provide important guidance for clinicians caring for these often fragile children.


Practical Healthcare Epidemiology - Ebhling Lautenbach 2018-04-19
A clear, hands-on outline of best practices for infection prevention that directly improve patient outcomes
across the healthcare continuum.