Perioperative Care of the Elderly
Perioperative Care of the Elderly

Clinical and Organizational Aspects

Edited by

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Forewords

Living at a time with an increasing worldwide number of surgeries every year and with an increasing number of elderly patients with coherent comorbidities, the present book on Perioperative Care of the Elderly: Clinical and Organizational Aspects is not only timely, but also extremely relevant. I could think of nobody else than Gabriella Bettelli to take on this ambitious work due to her longstanding interest in geriatric anesthesia and medicine, and being able to gather so many multidisciplinary experts in the field. From a "surgical" perspective and with an enduring interest in perioperative care as the founder of “fast-track surgery” or “enhanced recovery programs”, elderly surgical patients obviously represent a major challenge for surgeons due to the pre-existing complicated issues in many of these patients, thereby requiring assistance from so many other specialties than surgery per se.

From the list of chapters in this book, it is obvious that a unique multidisciplinary collaboration is required, which should not only stimulate further research and improvement, but also implementation of current knowledge in the daily clinical care of the elderly surgical patient. Thus, existing evidence from the “enhanced recovery concept” has demonstrated major benefits on recovery, including in elderly high-risk patients. Nevertheless, several challenges lie ahead, including problems with preoperative multipharmacological treatment in these patients, optimal pain management and physiotherapy, blood management, etc.

It is therefore with great pleasure that I congratulate Gabriella Bettelli and her coworkers for taking the effort to accumulate this knowledge and hopefully the book will have widespread use.

Professor Henrik Kehlet MD PhD Founder of ERAS (enhanced Recovery After Surgery) Copenhagen University, Denmark

Today I had to deliver anesthesia to a 100-year-old patient who had still been active at home until a fracture of the femur. The whole family gathered around his bed for a preoperative visit. It was difficult to hide their concern about the anesthesia (they were less afraid of the operation itself). I felt like an archaeologist taking in hands a very fragile piece of glass from 2000 years ago.

I have dedicated part of my professional career to trying to reveal to the general public the importance of the anesthesiologist as a perioperative physician. People sometimes have the prerogative to choose their surgeon (mainly in private centers), but very rarely feel the need to choose a good anesthesiologist. I finally felt, after all these years, that these relatives understood how much this patient was in the hands of the anesthesiologist. Will he survive the operation? Which anesthetic modality is the best for him? Will he suffer? Will he continue to be the same person after the operation?

Anesthetizing an elderly patient is a science, and in reading this book I realized the serious work done by the authors in analyzing in depth all aspects of this complex mission.

Chapter by chapter, all layers of this puzzle are covered: Comorbidities (we have to be cardiologists, neurologists, nephrologists and internal medicine doctors); Poly-medication and perioperative drugs management (elderly people are very often over-medicated and physicians add more and more new drugs to their treatment; nobody is brave enough to suspend previous drugs, so we have to be pharmacologists and try to find out how all these drugs interact between themselves and now with our anesthetics!); Cognitive and emotional evaluation (this is a fascinating topic that we have to confront: it’s easy to blame us, the anesthesiologists, for a cognitive dysfunction, but can we separate the anesthesia from the invasive “attack” caused by surgery itself?).

Physiological postoperative complications like cardiovascular, respiratory, renal and others are carefully analyzed, as well as important ethical aspects we have to confront daily when considering accepting elderly patients to our intensive care facilities.

As chair of the European Diploma Examination in Anaesthesiology and Intensive Care (EDAIC) for the
last 10 years I would highly recommend this book as a very instructive and didactic textbook. As a clinician, I would encourage everyone to have it available when having to deal with geriatric patients.

And to the general public I would strongly recommend paying attention to the crucial value and role of anesthetists as perioperative physicians and as part of the leading surgical team treating our parents and grandparents, and bringing them back to us in the best possible condition.

Finally I want to congratulate Dr. Gabriella Bettelli and all participating authors for this important contribution to our professional bibliography.

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It is with great pleasure that I respond to the invitation to write a foreword for this book.

Although we all agree that longevity is one of the most important achievements of modern society, an aging population remains one of the main challenges facing medicine in these first years of the twenty-first century.

Geriatricians have improved patient-related outcomes by developing Comprehensive Geriatric Assessment (CGA), defined as a multidimensional interdisciplinary diagnostic process focused on determining the medical, psychological and functional capability of the aged patient. The CGA can be considered a key instrument in the development of a coordinated, integrated plan for treatment and long-term follow-up, since it has a strong evidence base in acute hospital and community care settings. If geriatricians can contribute to improving the outcomes of older surgical patients, it will be primarily through the CGA. Despite recent advances in surgical and anesthetic techniques, older patients who undergo both elective and emergency surgery continue to experience excess adverse postoperative outcomes compared to younger subjects. Adverse outcomes have been attributed to the age-related physiological changes, geriatric syndromes, comorbidity, frailty and disability that characterize to a certain extent all aged patients. Therefore, specific efforts must be made to ensure that appropriate methods are used to define risk assessment and to optimize older patients’ conditions perioperatively. It is well established that the contribution of geriatricians is essential in evaluating and managing clinical risk. Identifying high-risk patients should not preclude surgical therapy; instead, it implies carefully examining the risk–benefit ratio of the surgical treatment proposed and attentively planning post-surgical care. The treatment goal as far as these patients are concerned is not just survival, but maintaining function, and reducing complications and rehospitalization rates, therefore foreseeing problems and preparing early and appropriate interventions to improve patient outcomes. A multidisciplinary approach based on a team of geriatric, surgical and anesthesia consultants, as well as trained nurses, is mandatory for guaranteeing this profile of care.

This book is written from a multidisciplinary viewpoint by a variety of specialists working together to provide the reader with a holistic view of the perioperative care of elderly patients. They bring to it a wealth of clinical experience and scientific expertise in the fields of geriatric surgery, anaesthesiology, geriatric medicine and nursing. Basing their contributions on their extensive experience and carefully examining all aspects of perioperative care, they have combined their scientific evidence with clinical judgement to produce a reference book that is relevant not only to surgeons and anesthesiologists, but also to geriatricians, nurses and other healthcare professionals as well as to health managers. They have taken into consideration a large volume of literature regarding the various facets of perioperative care, and they have provided state-of-the-art knowledge in the geriatric field upon which modern clinical practice in surgery and perioperative care can and should be based. I sincerely congratulate the editor and the authors of the individual chapters for this important contribution.

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Preface

The idea for this book was conceived in the light of the impressive increase in the number of older patients undergoing surgical care registered worldwide in recent years. Geriatric surgery is a field where perioperative medicine, surgery, anesthesiology, geriatric medicine and nursing disciplines interlace. Since fragmentation of care is deleterious for elderly patients, there is a need for an integrated vision of all these components, aimed to ensure unitary answers to patients’ needs through multidisciplinary, multispecialty, patient-focused principles and practices of care.

This book was written along three main guiding lines: to treat the person, not the condition, to look at surgical care as an element to be inserted in the patient’s life path and, finally, to consider any action, any step of the clinical management not as a separate, autonomous entity, but as part of a global process.

More than 25 centuries ago, Hippocrates remarked that it is more important to know what person has the disease than to know what disease the person has; this is even truer for older patients whose extreme variability in clinical and functional status requires a tailored approach and personalized care. Here is where comprehensiveness arises, and it is well known that geriatric medicine is the field of comprehensiveness. Thus, this book accords plenty of space to exploring aging processes from a cybernetic perspective, and cognitive, sensorial and functional evaluation in regard to the stress response to surgical aggression and methods to increase functional reserves.

Surgery is probably the area where ageism more pertinently and subtly persists; it is often hard to understand whether surgery is beneficial or detrimental for an older patient and may often be complex and demanding in terms of non-surgical (cognitive evaluation, functional status evaluation) or non-technical skills (communication in the first place). Hence, taking the shortcut of denying surgery may represent a prudential, non-harmful “emergency exit” for many surgeons and anesthetists. However, this is not the right answer for patients’ needs or expectations. All the areas of surgery are treated here from the perspective of adapting surgical treatment to the patient’s needs, evaluating the chances of succeeding and reaching the right decision in accordance with the patient’s preference and wishes.

Process approach is one of the keys for optimal management of any complex human activity: medicine- and care-related issues are probably the most complex, as a living body is involved, not a heap of organic molecules. A process-based perspective has been adopted throughout the book, and no single action is addressed as a paradigm of high-quality care. Indeed, efforts were made to consider any problem, decision and evaluation from a global, all-inclusive perspective, aiming to minimize postoperative functional derangement and proactively managing care after discharge.

Together with the excellent authors who make up the team of multidisciplinary, multispecialty experts, I tried to write a book not specifically intended for anesthesiologists, but for the geriatric surgical team as a whole; surgeons, anesthetists, geriatricians and nurses were all on my mental horizon while identifying its contents and structure, consulting medical literature and sewing together its 50 chapters. Hospital medical directors are also potential recipients of this book, as organization is inseparable from process governance, organization being the first response to complexity adopted in any field.

Chapters within the section “Optimal Organization of a Geriatric Surgical Unit” are probably precursors of as-yet-unpublished content referring to issues such as risk management, patient safety and systems engineering in geriatric surgery; they are not conceived in a merely mechanistic dimension, but are aimed to provide healthcare professionals with the basic elements needed to profitably interact with management.
Preface

experts, increasingly involved in day-to-day hospital organization.

With thanks to all the authors who took part in this work, I also acknowledge my old masters who taught me in the field of anesthesia and geriatric medicine: under the great plane tree still providing cool shade in the square of Kos (Πλατία Πλατανού) where Hippocrates taught his disciples, I would be happy to offer them in gratitude a glass of hippocras wine.