

BOOK REVIEW

Multiorgan Procurement for Transplantation: A Guide to Surgical Technique and Management

Paolo Aseni, Antonino M. Grande, Luciano De Carlis. 264 pages. Springer International Publishing Switzerland; 2016. Hardcover: US \$129.00; eBook: \$99.00; ISBN: 978-3-319-28414-9. Available from: www.springer.com/us/book/9783319284149.

Field of Medicine: Transplant Surgery and Organ Procurement, but applicable to many other medical disciplines.

Format: Hardcover book.

Recommended Readership: This book will be of interest to most practitioners of medicine, but especially to those who deal with organ procurement and transplantation—such as medical students, procurement specialists, surgeons, hepatologists, nephrologists, endocrinologists, cardiologists, pulmonologists, intensivists, and emergency-room and intensive-care-unit nurses.

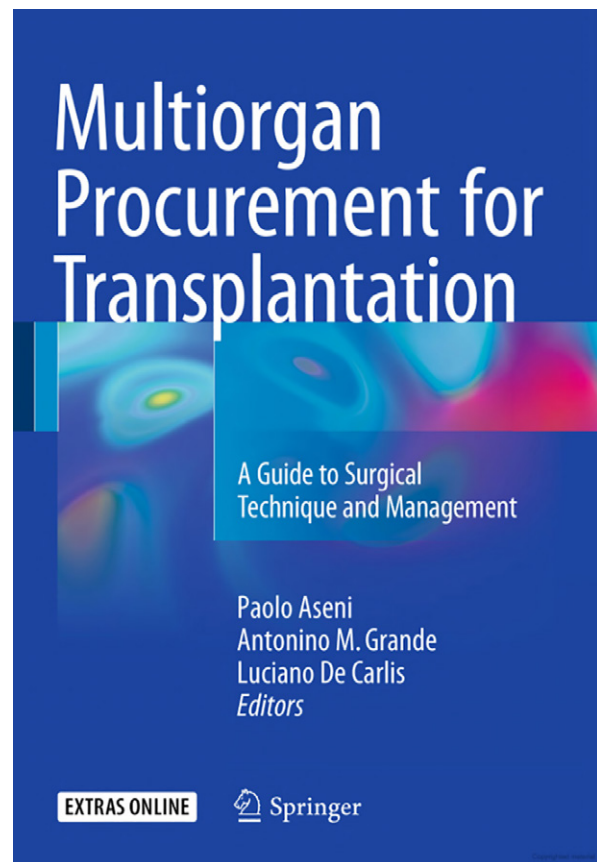
Purpose: To guide and to educate those involved in organ procurement and transplantation, focusing on the donor's perioperative evaluation and care, and extending to the donor-procurement operation.

Content: There are 264 pages of text, including a 2-page foreword, 5 sections comprising 22 chapters, and a 5-page appendix. The book also has a 2-page table of contents, 1 page devoted to the editors, and 3 to the contributing authors.

Strengths: This is an engaging text on organ procurement for transplantation. No matter one's level of experience in dealing with organ procurement, professionals at all levels will find this book informative, topical, and written with clarity. It serves as an excellent primer on organ procurement, and it fills a void in the canon of transplant-medicine texts.

The first section of the volume discusses the expansion of the donor pool, both in regard to increasing donor accrual and to evaluating and caring for prospective donors and organs. The ethics of organ donation is the first and most crucial consideration in organ transplantation, yet it also serves as one of the greatest impediments to correcting the imbalance of donors relative to the number of patients in need. A discussion of ethical considerations is comprehensive of the issues involved.

The second section of the book continues the discussion of brain death and preoperative management



for the eventual purpose of organ retrieval, and it talks about organ donation after cardiac death. This section is especially useful for intensivists, nurses, and organ-procurement specialists—who are responsible for the preoperative diagnosis of brain death and for the clinical care thereafter, which enables maximal organ retrieval. It explains the management of hemodynamic and metabolic impairments, including hormonal changes, glycemic derangements, and acid-base alterations. These matters are essential to the care of the donor organs, to improving post-transplant organ function, and to maximizing organ retrieval.

Chapters 3 and 4 deal with the procurement of thoracic and abdominal organs, respectively. These chapters are ideal for young surgeons, because they are thorough and complete—with diagrams and operative photographs to clarify technique. Each chapter is preceded by a section titled “tips, tricks and pitfalls,” which offers a practical guide on surgical technique and on donor procurement in general. These chapters address themselves to single-organ procurement, and also to surgical technique for multivisceral procurements, and to split-organ procurement as it pertains to the liver. They are accompanied by excellent illustrations.

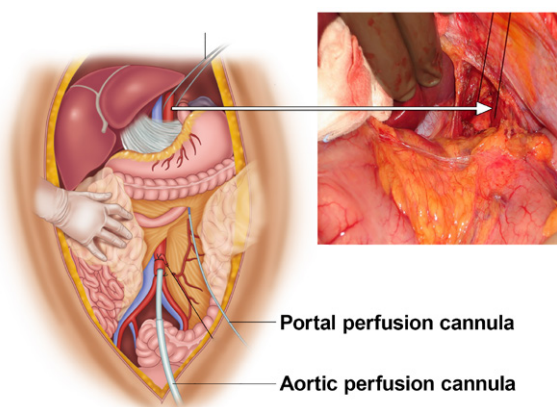


Fig. 1 Sample illustration: Preparation of the abdominal organs for perfusion after cannulation of abdominal aorta and inferior mesenteric vein. Organ perfusion can start.

There is a chapter dedicated to bench surgery on procured organs, in preparation for transplantation. As the final stage of organ procurement, bench surgery involves detailed inspection, dissection, and preparation of the abdominal organs. Emphasis is placed on the fact that organ quality is not always accurately forecast by preoperative factors alone. Furthermore, surgical injury to the allograft and the sequelae of such injury are always a risk during procurement, and therefore present a risk to recipients. The last chapter is dedicated to the living donation of liver and kidneys, via both the open and laparoscopic techniques.

This book is a useful tool for all professionals within the field of organ procurement and transplantation, and especially so for transplant trainees and surgical fellows.

However, it is a book that most medical professionals would be keen to read, because it answers the questions that most of them have about organ procurement. For the emergency-room nurse, the intensive-care-unit physician, the procurement specialist, and the procuring surgeon, this book is a thorough guide on the topic of organ donation and procurement, concise and digestible.

Weaknesses: None of substance. The book does not delve into transplant surgery and postoperative care, but neither should it. It is a focused reader on a specialized topic and does the job it intends to do, for an audience of specialized interests.

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Overall Grade: ♥♥♥♥

Grading Key

♥♥♥♥♥ = outstanding; ♥♥♥♥ = excellent;
♥♥♥ = good; ♥♥ = fair; ♥ = poor