Updates in Surgery
New technologies and a generation of surgeons mastering advanced minimally invasive surgery have greatly contributed to the development and growth of laparoscopic hepatic surgery.

Skepticism related to technical and oncological concerns initially limited the widespread acceptance and growth of this approach. However, the positive results obtained by skilled surgeons using the laparoscopic technique clearly demonstrate its advantages, as does the rate of oncologic clearance and disease-free interval for primary and secondary tumors, which is comparable with that of open procedures. Now, both minor and major hepatectomies are performed in specialized centers worldwide, and the slow diffusion rate of the technique itself guarantees that safe procedures are implemented.

Robot-assisted surgery is also developing as an important contribution to hepatic surgery: the more accurate and precise movements provided by robotic instruments, coupled with a much greater dexterity, facilitate complex posterior and superior resections and procedures involving biliary reconstructions.

This book meticulously describes the lights and shadows, indications and contraindications, pros and cons, advantages and limitations of minimally invasive surgery of the liver, analyzing its progression from technical evolution to highly delicate procedures and projecting into the future.

Fulvio Calise and Luciano Casciola, first-class leaders of the Italian surgical school and community, beyond their significant personal contributions, engaged the most distinguished domestic and international experts in minimally invasive hepatic surgery in the creation of this highly practical and enjoyable manual. The significant experience and scientific excellence of the contributing authors have culminated in an accurate description of laparoscopic and robot-assisted procedures related to all types of hepatic resections, defining in detail the necessary learning curve and clarifying the technological aspects of the procedures.
Thank you, Fulvio and Luciano, for this remarkable effort, and I hereby express my personal gratitude and that on behalf of the Italian Surgical Society.

Rome, September 2012

Gianluigi Melotti
President, Italian Society of Surgery
This book is meant as a challenge to the usual.

Scientific books usually certify and codify what has already been acknowledged and shared in clinical practice as they serve the purpose of improving what the scientific community has already established in the treatment of patients. In contrast, this book tries to indicate what could be safely done in the near future in a wider surgical context due to the extensive and increasing application of the laparoscopic approach to abdominal diseases.

We strongly believe that, thanks to the new technical modalities, the very near future will witness rapid change in the way of approaching liver diseases and, consequently, of learning how to carry out minimally invasive liver surgery. Although the latter is a highly questionable point, we think that learning will inevitably be modified by the swift advance of technology and that there will be a compelling need to change the rules of surgical training. Robotics will play a key role in forming young surgeons as soon as costs fall following the expiry of the original patents. Robotic surgery will then be able to achieve much wider and well-deserved diffusion.

We have therefore asked our colleagues to present what they consider to be best practices in their current activity and also what today, in some cases, is still regarded as somehow controversial in hepatobiliary and advanced general laparoscopic surgery. Thirty-one videos presenting all the techniques and technicalities related to a mini-invasive approach complete this book, together with a final survey of the last seven years of activity in this field in Italy. We think that the survey shows interesting practices both in dedicated hepatobiliary units and in general surgery units.

We sincerely thank all our co-authors for their work and for believing that this effort might contribute to a better insight into the way ahead for new generations of surgeons.

Naples and Spoleto, September 2012

Fulvio Calise
Luciano Casciola
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