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## Preface

Since the publication in 1993 of our book *Minimally Invasive Surgery in Gastrointestinal Cancer*, our interest has been the implementation of minimally invasive procedures in gastrointestinal cancer.

Surgeons continually strive to provide the best care possible for their patients. This focus on enhancing the quality of surgery brings them to employ the minimally invasive surgical (MIS) approach. Doing so, it reduces postoperative pain, lowers the risk of postoperative complications and increases the quality of life.

Surgeons have in the past decades demonstrated major progress in improving surgery. We have seen diagnostic invasive procedures replaced by a variety of imaging techniques providing high-resolution insight in the anatomical aspects of the disease, thereby allowing surgical teams to refine their surgical indications and approaches. We have seen large abdominal incisions replaced by minimal incisions, thus allowing patients to ambulate very early after surgery and reassume their activities within days instead of long postoperative stays in the hospital. We have seen endoluminal and image-guided percutaneous placement of stents or drains for relieving obstructions or fluid collections that impede the recovery of patients.

Hence it is no surprise that MIS is currently the standard surgical treatment in many areas of abdominal surgery, such as gallbladder surgery, the whole benign gastrointestinal surgery and colon and rectum cancer surgery.

Studies do continue to determine the quality of MIS. To be sure, the notion that minimally invasive procedures in upper gastrointestinal surgery, especially the oncological processes, are as efficient or even better than their counterpart of open surgery still follows different phases of becoming evident. For some procedures, like esophageal resection and partial gastrectomy for cancer, the evidence of the supremacy of MIS is now reasonably certain. High evidence even suggests that MIS may be superior to the counterpart open resections by providing clearer short-term advantages and equal oncologic safety. Other procedures, such as total gastrectomies, hepatic resections and duodenopancreatectomies for pancreatic head cancer, are still subject to high-level studies for determining how evidence-based these standard procedures are. Significant is that the introductions of high-definition imaging, 3D technology and robot-assisted surgery demonstrate the advantages of having a better visualization and ergonomics. These techniques involve the capacity to dissect and reconstruct tissues in difficult to locate places and suffice with a relative short learning curve.

Despite successes, upper abdominal MIS procedures remain difficult to standardize because of the complicated and tortuous surgical anatomy and due to the limited numbers of patients undergoing these procedures in comparison with, for example, the high numbers in colorectal surgery.

The philosophy of surgery we follow is that once a good indication exists for surgery, the combination of an optimal use of neoadjuvant therapy with minimally invasive surgery will achieve the best outcome for the patient, offering a high quality of life. Our objective in this book is to depict the current situation of minimal upper GI surgery in oncology. By doing so, we demonstrate how to perform these procedures with the minimum risk for the patients and simultaneously obtaining as many advantages as is feasible.

The setup for this book has five sections: the esophageal, the gastric, the duodeno-pancreas, the hepatic and splenic surgery. Each section starts with a chapter dedicated to surgical anatomy of the different areas that configure the upper abdomen, followed by different possibilities of neoadjuvant treatment of a specific cancer. After dealing with neoadjuvant treatment, a chapter compares the outcome of minimally invasive procedures in comparison with their counterpart open approach. More chapters treat the specific operative techniques of MIS, its outcome and the current situation whereby the robot-assisted minimally invasive surgery is used.

Knowledge of the surgical anatomy is very important for each surgeon and helps to standardize the use of convenient dissection planes and to perform a standard oncological resection.

The call for achieving higher proficiencies in MIS is clear. Mastering the MIS procedures is arduous and may take time. We realize that surgeons dedicated to upper abdominal surgery may have to gain proficiencies involving a lengthy learning curve while under the control and assistance of a master.

Moreover, readers of this book will be aided by a well-chosen collection of videos that describe the accomplishment of the surgical procedures in MIS.

Our gratitude for the splendid contributions of all authors is great. Their dedication to the design and implementation of the procedures treated in this volume is encouraging.

We hope that this book will enrich the knowledge and understanding of surgeons and surgical residents around the world who are dedicated to upper gastrointestinal cancer surgery and will inspire these professionals to persist in improving on surgery.

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