LAPAROSCOPIC and Thoracoscopic SURGERY

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With 130 Illustrations

Mosby
St. Louis  Baltimore  Berlin  Boston  Carlsbad  Chicago  London  Madrid
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To the pioneers and the innovators who led the revolution of laparoscopic surgery

and to

My wife and my children for their love and support through all the difficult times
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Foreword

Although both laparoscopy (peritoneoscopy) and thoracoscopy have been available to surgeons for a century, the actual employment by surgeons of these modalities was uncommon until recently. When the techniques were used at all, they were directed almost exclusively to performing diagnostic procedures—mainly, biopsies. Then, in just the last half decade, therapeuetic laparoscopy and thoracoscopy have burst upon the scene as the surgical phenomenon of the decade, if not the the half-century. The nature of surgical practice has been forever changed by the introduction and widespread acceptance of laparoscopic and thoracoscopic techniques for performing operative procedures.

Ten years ago no one had heard of laparoscopic cholecystectomy. But, last year in Wisconsin alone more than 10,000 elective laparoscopic cholecystectomies were performed. In the same year fewer than 20 elective cholecystectomies were done as deliberately open procedures. A major change, indeed! This change has been brought about because of the clear-cut advantages of laparoscopic cholecystectomy over the open method, advantages that include a need for less pain medication postoperatively, a shortened hospital stay, and earlier return to work and other activities. Clearly, the laparoscopic approach has become the standard of surgical practice for cholecystectomy.

The success of laparoscopic cholecystectomy resulted in efforts to extend the laparoscopic approach to other abdominal procedures and the thoracoscopic approach to thoracic operations. In part, the stimulus for these developments has been the desire of surgeons to explore new applications that appear to be feasible, and to apply accepted standards in evaluating their outcomes. Unfortunately, there also has been a prominent role played by the representatives of commercial manufacturers of disposable equipment and too much misdirected enthusiasm leading to compliant participation by some surgeons in performing new procedures before they have been adequately evaluated.
Among all the laparoscopic procedures, those involving the upper abdomen, such as fundoplication and highly selective vagotomy, seem destined to find increasing acceptance and employment by surgeons. Laparoscopic appendectomy shares some of the advantages of laparoscopic cholecystectomy and also probably will be used increasingly in the management of uncomplicated appendicitis, and as both a diagnostic and therapeutic tool in patients with perplexing right lower quadrant abdominal pain.

The current areas of controversy involve laparoscopic groin hernia repair and laparoscopic major colon resections for cancer. In the hernia arena, there are some problems needing attention. The routine use of a prosthesis in laparoscopic hernia surgery violates currently accepted principles of hernia repair, and is employed only because direct suture through a laparoscope is technically difficult. The incidence of postoperative neuralgia and other evidence of nerve impingement or damage following laparoscopic hernia procedures is relatively high; it seems to be related to blind placement of staples into the muscles of the lower abdominal wall and needs correction by changes in the technique of laparoscopic hernia repair.

The issues regarding laparoscopic treatment of colon cancer involve the adequacy of the dissection field and resection of adequate numbers of lymph nodes, the concept of laparoscopically "assisted" resections, the overall economic costs compared with an open colon resection, and the recurrence risk following laparoscopic resection. Ongoing clinical trials and further observation and follow-up will help to sort out the answers to these important issues. In the interval, surgeons doing laparoscopic colon procedures should be participants in the available clinical trials.

This volume, under the editorial leadership of Dr. Constantine Frantzides and with contributions by many members of the Department of General Surgery of the Medical College of Wisconsin and their colleagues across the country, addresses both the technical and the judgmental aspects of all of the current laparoscopic procedures, and provides an overview of thoracoscopy as well. It provides ready access to the latest thinking in these rapidly evolving fields. This text therefore fulfills a need and will find a deserved place on the bookshelf of surgeons interested in and practitioners of laparoscopic and thoracoscopic surgery.

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Preface

What we have witnessed during the last four to five years is a phenomenon that has no parallel in the history of medicine; it can best be called the Revolution of Laparoscopic Surgery. The revolution started with laparoscopic cholecystectomy but has now expanded into all areas of general surgery. The innovators and dreamers who drove the revolution were primarily surgeons in the private practice. Their academic counterparts viewed laparoscopic procedures with a great deal of skepticism and, at times, resentment. The notion of "big incision" being indicative of "big surgeon" was implanted deep into our philosophy. Three years ago I delivered a lecture titled "The Present and Future of Laparoscopic Surgery" to an audience composed of academic general surgeons. It generated a lot of discussion and much criticism. Shortly after the lecture I received a letter from one member of the audience, Dr. Leonard W. Worman. He wrote "I enjoyed your talk on laparoscopic surgery this morning. Your critics sounded like those who did not want me to get a flexible bronchoscope for our thoracic residents 25 years ago." Some obviously understand that we must have open minds with regard to new technology. Progress is not made by standing still.

As the revolution marches onward it is now recognized that laparoscopic surgery is here to stay and academic institutions realize that they must play a more active role in leading the development of laparoscopic surgery. New procedures must be evaluated in a prospective and scientific fashion. This can best be accomplished in an academic environment.

Laparoscopic surgery is in a dynamic evolutionary state. New procedures are developed and new concepts are adapted with phenomenal speed. This book covers all areas of laparoscopic and thorascoscopic surgery in a concise manner. Authors have made every effort to include in their chapters the latest information available in the literature. Data from a large spectrum of journals were utilized, and controversies and potential
"slippery slopes" are pointed out. It is our hope that this book will be a helpful guide not only to the general surgeon, but to any physician who would like to keep pace with the advances in this rapidly expanding and exciting field of surgery.

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