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*Deceased.*
Preface

The time has come to release the seventh edition of the classic textbook Shackelford's Surgery of the Alimentary Tract. This publication has served as an important resource for surgeons, internists, gastroenterologists, residents, medical students, and other medical professionals over the past 57 years. I hope that you will find the seventh edition brimming with new information, beautifully illustrated, up to date, and educationally fulfilling.

BRIEF HISTORY

The first edition of Surgery of the Alimentary Tract was written solely by Dr. Richard T. Shackelford, a Baltimore surgeon, and was published in 1955. Following the success of the first edition, the book’s publisher, W.B. Saunders Company, urged Dr. Shackelford to produce a second edition. Time passed. A second edition was released, as separate five-volume tomes, between 1978 and 1986, with Dr. Shackelford enlisting the assistance of Dr. George D. Zuidema, the Chairman of the Department of Surgery at Johns Hopkins, as co-editor. It was the second edition that served as my “bible” for alimentary tract diseases during my surgical residency and early faculty appointment.

The third edition, edited by Dr. Zuidema, was published as a five-volume set in 1991 and proved to be a major tour de force. The field of alimentary tract surgery had advanced, new research findings were included in the edition, and emerging techniques were illustrated. For the third edition, Dr. Zuidema enlisted the help of a guest editor for each of the five volumes.

The fourth edition, again headed by Dr. Zuidema, was published in 1996, and remained encyclopedic in scope, breadth, and depth of coverage. The textbook had become a classic reference source for surgeons, internists, gastroenterologists, and other healthcare professionals involved in the care of patients with alimentary tract diseases.

The fifth edition was published in 2002. At that time, Dr. Zuidema asked me to join him as a co-editor. The fifth edition remained a five-volume set, and was filled with new operative techniques, advances in molecular biology, and noninvasive therapies. It marked progress in the co-management of patients by open surgical, laparoscopic, and endoscopic techniques.

In 2007, the sixth edition of Shackelford’s Surgery of the Alimentary Tract was published. The look of the sixth edition was changed. The book went from five volumes to two volumes, deleting outdated material, and included a four-color production scheme, emphasizing new procedures and focusing on advances in technology.

THE SEVENTH EDITION

The seventh edition maintains the exterior changes and look of the sixth edition. However, the seventh edition has been carefully planned by me and the four expert section editors to represent the current state of alimentary tract surgery as practiced throughout the world. This edition has been completed with an enormous amount of assistance from my four colleagues, who have served as editors for the four major sections of the book. These section editors have worked tirelessly, planning, organizing, and developing this massive textbook. They have incorporated numerous changes in surgical practice, operative techniques, and noninvasive therapies within the text. Although each area does retain sections on anatomy and physiology, the numerous advances in genomics, proteomics, laparoscopic techniques, and even robotics are mentioned. The seventh edition includes the contributions of two new and two retained section editors, providing both innovation and stability.

Section I, Esophagus and Hernia, is again edited by Dr. Jeffrey H. Peters, the Seymour I. Schwartz Professor and Chairman of the Department of Surgery at the University of Rochester School of Medicine and Dentistry in Rochester, New York. Dr. Peters is an internationally known expert who brings his detailed knowledge of the esophagus and esophageal diseases to the textbook. Dr. Peters’ reputation has been recently elevated by his being named as an associate editor of one of the most prominent surgical journals, the Annals of Surgery. He has enlisted new authors for many chapters and has again put together a spectacular section on esophageal diseases, including pathology and ambulatory diagnostics, extensive sections on gastroesophageal reflux disease, esophageal motility disorders, and esophageal neoplasia.

Dr. David W. McFadden has taken over as the editor for Section II, Stomach and Small Intestine. For most of the time during this edition’s preparation, Dr. McFadden served as the Stanley S. Fieber Professor and Chairman of the Department of Surgery at the University of Vermont, in Burlington, Vermont. As of January 2012, Dr. McFadden has started a new position, at the University of Connecticut in Farmington, Connecticut, serving as the Professor and Chairman of the Department of Surgery. Dr. McFadden is an expert in alimentary tract diseases, surgical research, and education. He has served for many years as the co-editor-in-chief of the Journal of Surgical Research, and he has served as the president of the Society for Surgery of the Alimentary Tract. He has done a superb job of enlisting new chapter authors so as to present a modern, new, updated section regarding the luminal structures of the upper gastrointestinal system. Dr. McFadden’s section is an outstanding contribution to this area.

For Section III, Pancreas, Biliary Tract, Liver, and Spleen, we have another new section editor, Dr. Jeffrey B. Matthews, the Dallas B. Phemister Professor and Chairman of the Department of Surgery at the University of Chicago, in Chicago, Illinois. Dr. Matthews’ surgical career has focused on diseases of the nonluminal
structures of the alimentary tract, and he has done a superb job in enlisting new contributors and reorganizing this section. Dr. Matthews’ credentials include serving as the co-editor-in-chief of the *Journal of Gastrointestinal Surgery*, and he is soon to be the president of the Society for Surgery of the Alimentary Tract. This section has been carefully redone and serves as an outstanding contribution to the field.

Finally, Section IV, Colon, Rectum, and Anus, has once again been expertly edited and supervised by Dr. John H. Pemberton, Professor of Surgery at the Mayo Clinic College of Medicine in Rochester, Minnesota. Dr. Pemberton is an internationally known figure in his field, and his section has been wonderfully redone. Included are various new developments in the field, updates on pelvic floor anatomy and physiology, new therapies for inflammatory bowel disease, increased emphasis on laparoscopic interventions, and new chapters dealing with both surgical outcomes and an overview of colorectal surgery.

**ACKNOWLEDGMENTS**

The seventh edition would have been impossible to complete without the expertise, dedication, and hard work of each of these four expert section editors. They have been helped immensely by their colleagues, staff, and all the chapter contributors. I would like to thank each of these section editors for their vision, dedication, expertise, and incredible hard work in bringing this project to fruition.

As is often the case with printed works of this size, hundreds of individuals have contributed chapters to this edition. In fact, more than 400 contributors are listed in the Contributors section. We understand how difficult it is to produce superb chapters, and I wish to recognize these individuals and thank them for their dedication and commitment. Most of these contributors are nationally and internationally known leaders in their fields, and I am deeply indebted to them for sharing their knowledge and enthusiasm about their topic, culminating in an outstanding overall product.

I would also like to thank the production team at Elsevier, who again have been instrumental in making this edition a reality. My thanks go out to Judith Fletcher, Jessica Becher, Marie Clifton, Teresa McBryan, and Maureen Iannuzzi, and many others who have been involved in overseeing this project. This edition represents an enormous amount of new work, and thousands of hours have been spent on its production. These professionals have made it a labor of love to work on this project.

Finally, I must thank individuals who have helped me during this new edition process over the past four years. Here in my office at Jefferson Medical College, accolades go out to Claire Reinke and Dominique Marsiano, who have been outstanding assistants in bringing this work to fruition. Even in the current day and age of electronic mail and electronic manuscript management systems, there is much that still gets done using paper and writing implements!

Charles J. Yeo, MD
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JOHN H. PEMBERTON
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To write a perspective is to describe clearly and discernibly a subject, in this case the history of esophageal surgery, through the medium of a retrospective scope. The purpose in doing so is to benefit from the collective experience of those who have preceded us in the field. According to C.S. Lewis, “authority, reason and experience; on these three, mixed in varying proportions, all our knowledge depends.” If today’s esophageal surgeons desire to learn from their predecessors and not repeat their errors, the historical milestones in esophageal surgery must be appreciated, understood, and embraced. The modern esophageal surgeon is not what he or she does. Rather, they are what they think and understand, because what they think and understand determines what they do. We must keep a balance between our understanding and our doing. I encourage the young esophageal surgeon to listen seriously to the words of C.S. Lewis. They need to heed the authority of those older physicians and surgeons who with minimal technology moved the science of esophageology forward. They need to reason their way to new insights in esophageal disease. In so doing, they can have the confidence that in the accumulation of their own experience they will set new standards for the future treatment of esophageal disease.

DIAGNOSIS OF ESOPHAGEAL DISEASE

To comprehend the esophageal diseases requires the capacity to visualize affected tissue. Prior to the advent of clinical endoscopy, an autopsy was the only means to visualize diseased esophageal tissue. The pathology consisted mainly of spontaneous esophageal perforations (Boerhaave syndrome) and tumors of the esophagus. The opportunity to study inflammatory disease, such as esophagitis, was limited as damage to the esophageal mucosa was assumed to be due to postmortem autolysis by digestive enzymes during the interval between death and when the autopsy was performed. Particularly, any mucosal injury at the gastroesophageal junction was assumed to be a postmortem change. Consequently, esophagitis and inflammatory strictures were not known to exist until Heinrich Quincke, a German pathologist, reported in 1879 the finding of distal esophageal ulcers in three cadavers. Despite the evidence that ulcers were a sign of premortem healing, the report was viewed as a postmortem curiosity. Similarly, his hypothesis that the ulcers were caused by the regurgitation of gastric juice into the esophagus was also ignored. It was not until the introduction of the rigid esophagoscope, 130 years ago, by Bevan in 1868, Kussmaul in 1868, and Mikulicz in 1881, that esophageal ulcers could be visualized prior to the patients’ death. Subsequently, several breakthroughs in technology permitted the complete and safe examination of the entire esophagus, stomach, and duodenum in the living patient. These breakthroughs were the development of the incandescent light bulb by Thomas Edison in the 1870s, the rod-lens system by Hopkins in the 1950s, fiberoptic cold-light transmission in the 1960s, and the computer chip video camera in the 1980s. Combined, these advancements allowed the development of a reliable flexible endoscope to directly examine and biopsy the esophageal, gastric, and duodenal mucosa. The flexible endoscope opened the door to the understanding of the pathophysiology of esophagitis, stricture, and Barrett esophagus with its inherent cancer risk. The subsequent development of clinical radiology, esophageal motility, prolonged esophageal pH monitoring, and endoscopic esophageal ultrasonography added additional diagnostic tools to the field and further clarified esophageal pathophysiology.

ESOPHAGEAL CANCER

Cancer of the esophagus provides a unique challenge for the surgeon. For decades, surgical pioneers struggled to safely remove the diseased organ. Emslie, in his “Perspectives in the Development of Esophageal Surgery,” states, “the history of esophageal surgery is the tale of men repeatedly losing to a stronger adversary yet persisting in this unequal struggle until the nature of the