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GENERAL THORACIC SURGERY

VOLUME ONE

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Health

GENERAL THORACIC SURGERY

Seventh Edition

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The Seventh Edition of General Thoracic Surgery is dedicated with my sincere thanks to the co-editors and the many contributors to this volume. I also want to thank all of those who contributed to the first six editions starting in 1972. It has been a long road but a fruitful one for the advancement of the science and practice of the specialty of General Thoracic Surgery.

All of the participants can be proud of their involvement in this endeavor.

—T.W.S.

To the memory of my Dad who set the bar high – Always goal directed, forever ebullient, amazingly adaptable and in the face of adversity, doggedly determined to the end.

—J.L.

To my patients, whose courage and trust inspire me.

—C.E.R.

To my two sons, Dr. Eric N. Feins, MD, and Lieutenant JG Jonathan C. Feins, USN, both of whom have educated me on a daily basis about what the pursuit of excellence is all about, and to my wife, Ceil, who has made everything possible

—R.H.F.

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Preface to the Seventh Edition

Continuing in the tradition of the first edition, the seventh edition presents a comprehensive text on the surgical diseases of the trachea, lung, chest wall, pleura, diaphragm, esophagus, and mediastinal structures. The major objective remains to present a summation of the current knowledge and the concepts of the surgical management of the diseases of the thorax including congenital and acquired conditions as well as trauma.

Because of the fast pace of discovery of new knowledge and advancement of technology among disciplines studying and treating diseases of the chest, we continued our practice of giving full coverage of the cogent advances in molecular biology, radiology, critical care, and other specialties that affect the practice of general thoracic surgery. Likewise, we continue to stress the technical aspects of our field of interest. This is especially true in the many chapters on minimally invasive techniques. Particularly at the speed of development of a text of this magnitude, it is hard to see or even speculate on developments over the horizon. However, we made attempts to include late breaking developments such as the changes to the staging systems for non-small-cell lung cancer and esophageal cancer.

Over the years, the text has become more international, recognizing the global partnership in the evolution of the specialty of General Thoracic Surgery. Where possible, we tapped the leading experts on particular subjects to contribute, while making an effort to temper any bias with fact, reports of investigations, and evaluation of clinical series.

The book remains organized similarly to the first edition, with a presentation of the anatomy and physiology of the organ systems followed by the perioperative care, the operative approaches, and then the organ-specific disease entities in detail with the prognosis following surgical intervention. Also in the tradition of the previous editions, the many unusual conditions that are encountered only infrequently by the practicing surgeon are chronicled and interventions evaluated so that the text may serve as a ready source of information not only for the thoracic surgeon but also for members of other specialties who are interested in thoracic diseases.

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Preface to the First Edition

This volume was prepared to present a comprehensive text on the surgical diseases of the chest wall, pleura, diaphragm, trachea, lung, and mediastinal structures. Initially, an overview of the anatomy and of the physiology of these structures is given. The investigation of the patient's disease and the management of the patient in the perioperative period are considered next. The various operative approaches and the standard surgical procedures are discussed and these are followed by chapters concerned with the disease entities of the aforementioned structures.

The major objectives are to present a summation of the current knowledge and the clinical concepts of the surgical management of trauma and diseases of the thorax. The pathophysiologic alterations produced and the correction of these by appropriate intervention are emphasized throughout. Presentations of the clinical features, pathologic changes, surgical management, operative results, and prognosis of the various disease states are included as an integral part of the whole.

Outstanding surgeons, physicians, and scientists have cooperated in the preparation of the text. As with most multi-authored books, repetition could not be completely eliminated; however, I have tried to keep it at a minimum. In most instances, the repetition serves to emphasize important information relative to the entire subject. Interestingly, conflicting statements are few, and only an occasional footnote has been appended to point out such differences in opinion. This book hopefully will serve as a source of information for the young thoracic surgeon and the person in surgical training. It also should serve as a reference for surgeons, as well as physicians, outside the field of general thoracic surgery who wish to ascertain the current views held by the specialty.

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