

In the past decade, there was more evidence that minimally invasive surgery for the management of lung cancer is effective and associated with fewer complications and shorter hospital stays. Nevertheless, the use of minimally invasive surgical approaches, particularly video-assisted thoracic surgery (VATS) and Robotic-assisted thoracic surgery (RATS), continues to grow slowly and limited to academic and some community medical centers. As the population ages, more patients are diagnosed with lung cancer at an older age. Patients of older age may have more comorbidities. This situation compels the treating medical team to deal with more complex medical conditions in the perioperative period.

Fortunately, there was a significant interest in the scientific community in this area. Hence, the researchers conducted more studies in the perioperative care of lung cancer surgery. The outcome was improved by optimizing patients' conditions preoperatively and minimizing operative complications. The postoperative management of complications can be challenging. Especially the ones that require re-intervention like in cases of bronchopleural fistula. In this book, we present articles that were authored by well-recognized experts in the field of thoracic oncology and perioperative care.

Preoperatively, we included many interesting papers investigating the patients' performance and other factors that have a significant impact on the surgical outcome. There were remarkable papers about the immune-nutritional status and prognostic nutritional indexes and biomarkers. The authors also investigated other preoperative predictors for post-surgical outcomes. These predictors include the smoking status, age, and physiologic factors like the resting heart rate and six-minute walk distance and markers for acute kidney injury.

During lung cancer surgery, many factors should be thoroughly monitored and managed to prevent operative and postoperative complications. Included in this book are articles about ventilation and anesthesia in patients undergoing lung cancer surgery. Notably, fluid management was discussed in four articles and intended to answer the questions of what is the optimal fluid management for a better outcome. Surgical resection remains the first-line therapy for early-stage lung cancer. However, more data are demonstrating the efficacy and safety of stereotactic body radiotherapy (SBRT) in managing early-stage lung cancers. SBRT is the treatment of choice for early-stage lung cancer patients who are poor or non-surgical candidates. Many authors in this book addressed the question of surgery versus SBRT for operable early-stage lung cancer, but more randomized controlled studies are needed to provide a definitive answer. Surgery versus SBRT in the treatment of oligometastases remains debatable and pending more prospective comparative data; patients are managed based on multidisciplinary discussion and patients' preferences.

There is comprehensive coverage of the postoperative management of patients undergoing lung cancer surgery. Many articles are discussing the management of chest tubes and the importance of chest ultrasound in the early postoperative period. The postoperative complications were also largely covered. One of the most challenging and feared complications is the bronchopleural fistula (BPF) after lung cancer surgery. The management of BPF can be complicated, and the medical, surgical, and bronchoscopic management of BPF was very well covered. The bronchoscopic management of BPF using different kinds of customized airway stenting was much discussed in this book. There were innovative and effective techniques that resulted in good outcomes.

This book broadly covers all aspects of the perioperative patient care. It offers expert opinions and comments on original research papers and systematic reviews. We are delighted by the contributions of all authors in this book. They share the same mission of improving patient care by optimizing management using the standard of care and innovations. We believe that this volume brings readers the latest updates in the management of surgical lung cancer patients.



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