

Section I: Preoperative Assessment

- 1. The Development of Thoracic Anesthesia and Surgery***
- 2. Anatomic Correlates of Physiologic Function***
- 3. Radiology of the Thorax***
- 4. Intra-Thoracic Tumors: Current Status and Classification***
- 5. Pulmonary Pathophysiology and Lung Mechanics in Anesthesiology***
- 6. PHYSIOLOGY OF THE LATERAL POSITION AND ONE-LUNG VENTILATION***
- 7. Modulating the Pulmonary Circulation: Nitric Oxide and Beyond***

Section II: Preoperative Preparation

- 8. Preoperative Evaluation - Assessment of Preoperative Risk***
- 9. Prerehabilitation for Thoracic Surgery***

Section III: Intraoperative Preparation

- 10. Positioning in Thoracic Surgery***
- 11. Monitoring of Oxygenation and Ventilation***
- 12. Hemodynamic Monitoring in Thoracic Surgical Patients***
- 13. Flexible and Rigid Bronchoscopy in Thoracic Anesthesia***
- 14. High Frequency Ventilation: Applications in Thoracic Anesthesia***

Section IV: Intraoperative Management

- 15. Anesthesia, Mechanical Ventilation and Hypoxic Pulmonary Vasoconstriction***
- 16. Separation of the Lung: Double-Lumen Endotracheal Tubes and Endobronchial Blockers***
- 17. Lung Isolation in Patients with a Difficult Airway in Thoracic Anesthesia***
- 18. The Pathophysiology of Perioperative Lung Injury***

19. Intraoperative lung injury during One-Lung Ventilation: causes and prevention

20. Management of One Lung Ventilation: Protective Lung Ventilation

21. Fluid Management During Lung Resection

22. Perioperative Arrhythmias During Thoracic Surgery

23. Anesthesia for Pediatric Thoracic Surgery

Section V: Post Operative Management

24. Postoperative Pain Management of Acute Pain

25. Post-Thoracotomy Chronic Pain

26. Postoperative Care of the Thoracic Patient

27. Postthoracotomy Complications

28. Extracorporeal Ventilatory Therapies

Section VI: Specific Anesthetic Considerations

29. Lung Volume Reduction Surgery

30. The Patient With Cardiovascular Disease for Lung Resection Surgery

31. Video Assisted Thoracoscopy: Multiportal, Uniportal

32. Endoscopic Treatment of COPD

33. Thoracic Trauma

34. Mediastinal Mass and SVC Syndrome

35. Mediastinoscopy

36. Lung Resection and Pulmonary Hypertension

37. Tubeless Thoracic Procedures

38. Thoracic Anesthesia for the Geriatric Patient

39. Thoracic Aortic Aneurysm Resection

40. Wedge Resection, Lobectomy, Pneumonectomy

- 41. Repair of Pectus Excavatum***
- 42. Tracheal Resection and Reconstruction***
- 43. Lung Transplantation***
- 44. Esophageal Procedures***
- 45. Airway Fistulas in Adults***
- 46. Thoracic Approach to Spine Procedures***
- 47. Myasthenia Gravis and Thymectomy***
- 48. Hemoptysis, Empyema***
- 49. Thoracic Anesthesia in the Morbidly Obese Patient: Obstructive Sleep Apnea***
- 50. Cystic Fibrosis***
- 51. Tracheal Stents***
- 52. Robotic Thoracic Surgery***
- 53. Enhanced Recovery After Thoracic Surgery***
- 54. Ultrasound of the Lung: Clinical Applications***
- 55. Transesophageal Echocardiography in Noncardiac Thoracic Surgery***