

General anesthesia combined with intubation and single lung ventilation have always been considered routine techniques in modern thoracic surgery. Over the past two decades, there has been tremendous growth in thoracic surgery with the development of multiport and uniportal minimally invasive techniques. However, the development of a non-intubated technique during which thoracic surgery is performed on patients who are spontaneously ventilating awake, under minimal sedation with the aid of local or regional anaesthesia or under general anaesthesia with a supraglottic airway device is winning acceptance as a valid alternative technique. The concept is to allow spontaneous pneumothorax to occur when the surgeon enters the chest. This can provide good lung isolation without the need for positive pressure ventilation to the dependent lung. Wakefulness and minimal sedation techniques, which avoid the need for general anesthesia and maintain a more physiological cardiopulmonary and neurological state, greatly reduce postoperative complications. Non-intubation anesthesia techniques for thoracoscopic surgery are innovative and exciting, and push to reduce the invasive nature of the procedure. Nevertheless, there is a lack of awareness about the technique that limits its application.

The purpose of this book is to introduce the information for the busy clinical thoracic surgeons, anesthesiologists and professionals. The book consists of four parts. First, anesthesia of tubeless thoracic surgery. Second, thoughts about tubeless thoracic surgery. Next, the application of tubeless thoracic surgery. Finally, the postoperative efficacy and management of endoscopic thoracic surgery.

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