Preface

Tubeless video-assisted thoracic surgery (VATS) entails procedures carried out without tracheal intubation and with maintenance of spontaneous ventilation. This in order to summing up advantages deriving from avoidance of intubated anesthesia with one-lung mechanical ventilation to those of a minimally invasive surgical access.

Following sparse experiences in few centers of excellence, adoption of tubeless VATS is now expanding and many surgical procedures are increasingly carried out through tubeless strategies, which basically include fully awake anesthesia management or mild target sedation.

The basic perspective was initially to pursue a less morbid surgical management and a quicker recovery in geriatric patients, and in subjects with poor pulmonary function or multiple comorbidity. However, novel intriguing perspectives have been progressively added including the potential for a lesser impact on early immunological defense, an easier management of patients with small tracheal caliber and creation of fast track pathways for patients with thoracic trauma, multi-organ impairment or complex infections requiring surgical care. As a result, adoption of tubeless VATS has switched from simple procedures such as treatment of recurrent pleural effusion and of spontaneous pneumothorax to a broader range of procedures including lung volume reduction surgery, anatomical lung resection and even tracheal resection and sleeve lobectomy (Figure 1). In addition, the recent development of single-port VATS approaches has allowed the proposal of combination strategies including use of VATS with single skin incision and tubeless anesthesia, which now promise a novel micro-invasive or minimalistic surgical care.

Research in tubeless VATS is favoring creation of cooperative multidisciplinary groups of investigation that include thoracic surgeons, anesthesiologists and other specialists working together to help elucidate the numerous issues that are still underinvestigated or fully obscure.

I recommend expert thoracic surgeons who desire to up-date their knowledge as well as trainees and any other stakeholders who are interested in familiarizing with tubeless VATS to read this book, which collects all recent articles published in AME Publishing Company scientific Journals and offers a useful summary of the most meaningful advancements achieved in the field by recognized experts from Asia, Europe and USA.

I am also confident that as an additional goal, thoracic surgeons with no experience in tubeless VATS will be stimulated to start adopting these highly promising surgical strategies.

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