Preface

The outcomes of surgery should be beneficial to every aspect of a patient’s life, starting from the surgery itself. This means a less invasive surgical procedure, resulting in a faster postoperative recovery, better postoperative quality of life, and longer postoperative survival. In the past, even 3 months ago, patients, surgeons, and anesthesiologists alike would be hard pressed to imagine that a carina or tracheal reconstruction could be performed under non-intubated anesthesia, that a patient can partake of food and drink normally within 3hrs post lobectomy, or that it is even possible for a patient to be discharged within 24 hours after thoracic surgery. Historically speaking these outcomes have been only a dream in the minds of minimally invasive surgeons. Under tubeless VATS these dreams have become a reality.

Tubeless VATS entails procedures carried out under Non-intubated spontaneous respiration anesthesia without the use of a chest drainage tube or urinary catheter. By forgoing the use of the ‘tubes’ all pain and complications associated with tracheal intubation, muscle relaxants, chest tubes, discomfort at the site of incision, and urinary catheters are avoided. The most prominent desire of surgeons and patients is less surgical trauma, with a resulting faster recovery and better post-operative quality of life. The benefit of tubeless VATS can be seen in the incredibly speedy post-operative discharge and recovery.

An important aspect of tubeless procedures is its flexibility. Tubeless VATS is unique in that the majority of patients with a BMI <23 are eligible for the procedure. In China specifically, this means more than 50% of thoracic surgery patients may be eligible for tubeless procedures. Moreover, in some instances, though a patient may not be suitable for a non-intubated procedure, he may still be eligible to undergo a procedure without the use of the chest drainage tube or urinary catheter. The same goes for use of chest drainage tube or urinary catheter. Hence it demonstrates flexibility and adaptability depending on patient's condition.

Finally of note, tubeless VATS is feasible in not just simple procedures, but also complicated procedures. In fact, tubeless VATS may be preferred in trachea operations where traditional tracheal intubation may obstruct the surgeon’s operative view. Without the use of tracheal intubation, anastomosis during a tracheal operation can be completed in a little as 15-20 minutes. Of course, the options for application of tubeless VATS in various simple procedures should go without saying.

Increasing adoption of tubeless procedures is being seen and popular worldwide. Though training of both surgeons and anesthesiologists in necessary to familiarize themselves with the indications and the complete surgical procedures, in the coming future it is feasible that tubeless VATS may be applied in more than 50% of thoracic surgical patients worldwide; that is to say that more than 1 million patients can benefit from a faster recovery or day chest operation around the world each year.

Jianxing He, MD, PhD, FACS,
President, the First Affiliated Hospital of Guangzhou Medical College;
Chief, Department of Cardiothoracic Surgery,
the First Affiliated Hospital of Guangzhou Medical College;
PI, Guangzhou Research Institute of Respiratory Disease & China State Key Laboratory of Respiratory Disease
No. 151, Yanjiang Rd, Guangzhou 510120,
Guangdong Province, PR China.
Email: drjianxing.he@gmail.com