Uniportal VATS Reduced Thorax Drainage and Risk of Uplanned Return to OR for Lung Cancer Patients

Shugeng Gao, Jiagen Li, Bin Qiu, Marco Scarci, Jie He

Uniportal VATS surgery could bring lower post-operative thorax drainage and lower risk of unplanned return to OR for lung cancer patients indicating its potential value in fast recovery.

The features of 861 lung cancer patients who received VATS anatomical lung resection (246 uniportal 615 multiportal VATS surgery) by a single surgeon in the National Cancer Center of China were retrospectively reviewed. Comparison showed that uniportal VATS group patients has significantly lower postoperative thorax drainage (830.0 ml ± 666.0 ml vs. 1135.6 ml ± 786.6 ml, p<0.001) and comparatively lower rate of unplanned return to OR (0 vs. 0.8%, p=0.156) than those who received multiportal VATS surgery.

Introduction
Uniportal VATS surgery has gone through a significant development and has spread widely in recent years. In this study, we aimed to investigate the effect of uniportal VATS surgery in reducing the post-operative thorax drainage of lung cancer patients.

Key Question
What benefits does uniportal VATS surgery have for lung cancer patients?

Key Findings
Uniportal VATS surgery reduced post-operative thorax drainage and risk of unplanned Return to OR.

Take Home Message
Uniportal VATS surgery could reduce post-operative thorax drainage and has potential value of fast recovery for lung cancer patients.

Post-operative thorax drainage volume of lung cancer patients who had received uniportal and multiportal VATS surgery

Uniportal VATS surgery reduced post-operative thorax drainage and has potential value of fast recovery for lung cancer patients.

Fewer incisions of uniportal VATS surgery promote post-op recovery for lung cancer patients.

Directed by Academician Jie He, the Dept. of Thoracic Surgery of China National Cancer Center started to perform uniportal VATS surgery in the treatment of lung cancer since Nov. 2014. Up to now, we have performed over 3000 lung cancer surgeries using uniportal VATS including complicated cases like segmentectomy, sleeve lobectomy and pneumonectomy.

Post-operative recovery of patients in the uniportal and multiportal group.

We are now investigating the value of uniportal VATS surgery for the treatment of lung cancer patients by perspective, randomized trials. There are two ongoing perspective studies focusing on this topic in our center.