

MINI-INVASIVE THORACIC SURGERY FOR EARLY-STAGE LUNG CANCER: WHICH IS THE BEST



SURGEON’S APPROACH TO VIDEO-ASSISTED THORACIC SURGERY?

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Objective

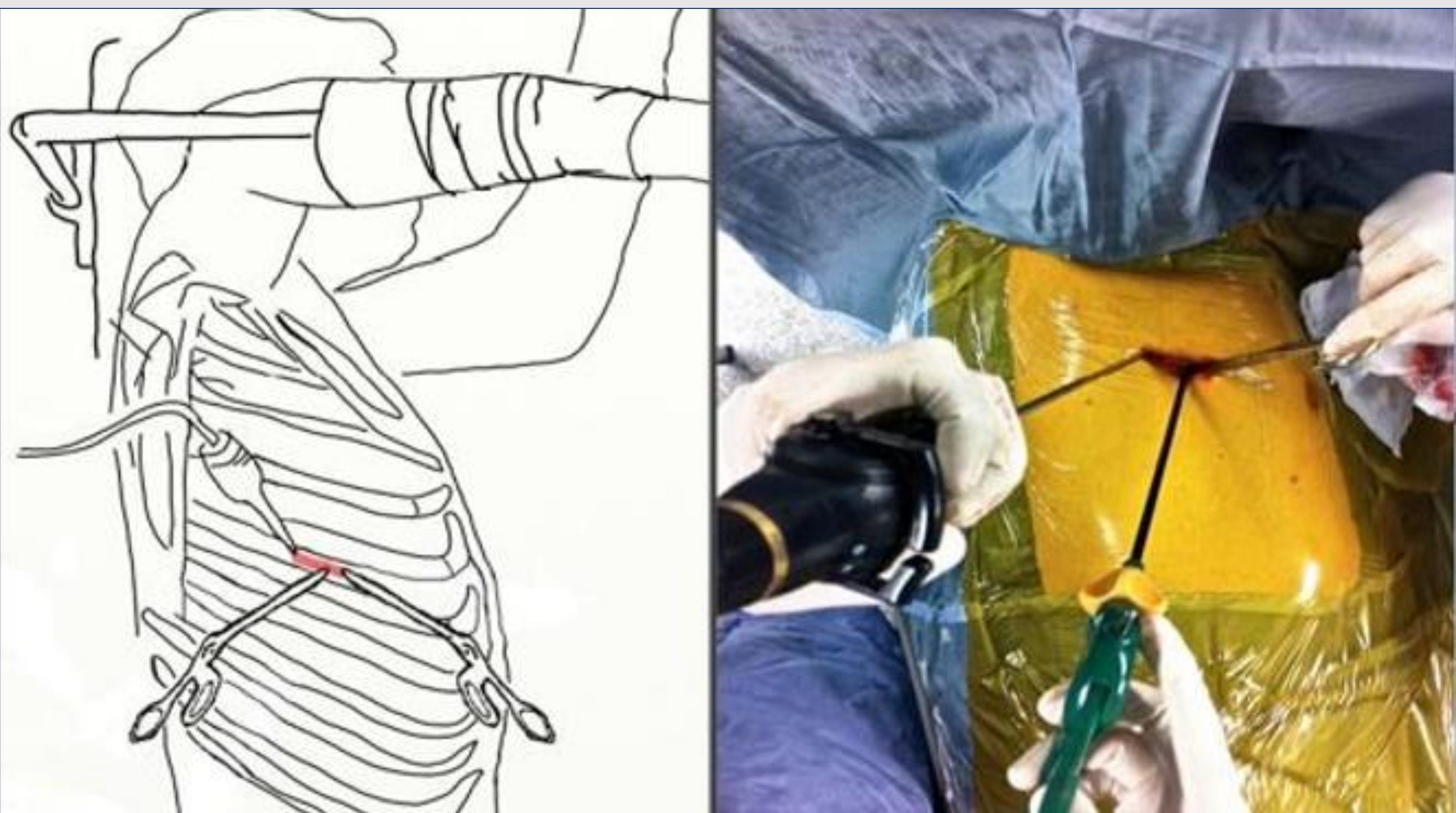
The advantages of Video Assisted Thoracic Surgery (VATS) for an enhanced recovery after surgery are well known. The choice of the best mini-invasive surgical approach is still debating, balancing between innovation and self-confidence for the surgeon. The aim of the study is to report the results of a high-volume centre, comparing data of Uni-portal, Bi-portal and Tri-portal VATS.

Methods

- 2015-2022: 210 matched patients underwent VATS lobectomy for early-stage cancer
- Matching: age, BPCO, smoking habit, comorbidities, pathology (stage and size)
- Three homogeneous groups: 70 Uni-portal (UVATS-A); 70 Bi-portal (BIVATS-B); 70 Tri-portal (TRIVATS-C)
- Surgical Access: uni-portal (on the fifth intercostal space), bi-portal (the seventh space for optic and the fifth), tri-portal (the seventh and the fifth/four on anterior and posterior axillary line)
- Surgeons had comparable expertise

U-VATS(70)	BI-VATS(70)	TRI-VATS(70)	p	
Conversion	0	0	0	1.000
Bleeding	0	0	0	1.000
PAL	0	0	0	1.000
Minor compl.	20	10	30	0.497

PAL (Prolonged Air Leak); Minor compl. (Minor complications)



Uniportal approach

Results

- No significant differences in time of surgery, length of hospital stay, complications, conversion rate, specific survival, pain, days of chest permanence
- Better results on chest tube permanence were described in group A (mean 1.1 days) compared to group B (mean 2.6 days) and C (mean 4.7 days), even not statistically significant (p=0.106).

Conclusions

The minor chest tube permanence in site in the uni-portal group allows to hypothesize an enhanced recovery after surgery in this set of patients.

Nevertheless, the three approaches in this series seem to guarantee comparable safety, effectiveness, and oncological results.

In conclusion, considering no superiority of one method, the best suggested approach is the one for which surgeon feels more confident.

Self-confidence and personal safety for surgeons give the most effective result for patients.

DAYS OF CHEST TUBE PERMANENCE

	Mean	SD
U-VATS	1.1	2.5
BI-VATS	2.6	2.1
TRI-VATS	4.7	1.5

ANOVA

Sum of square	gl	mean square	F	p
45.238	2	22.619	2.545	0.106