

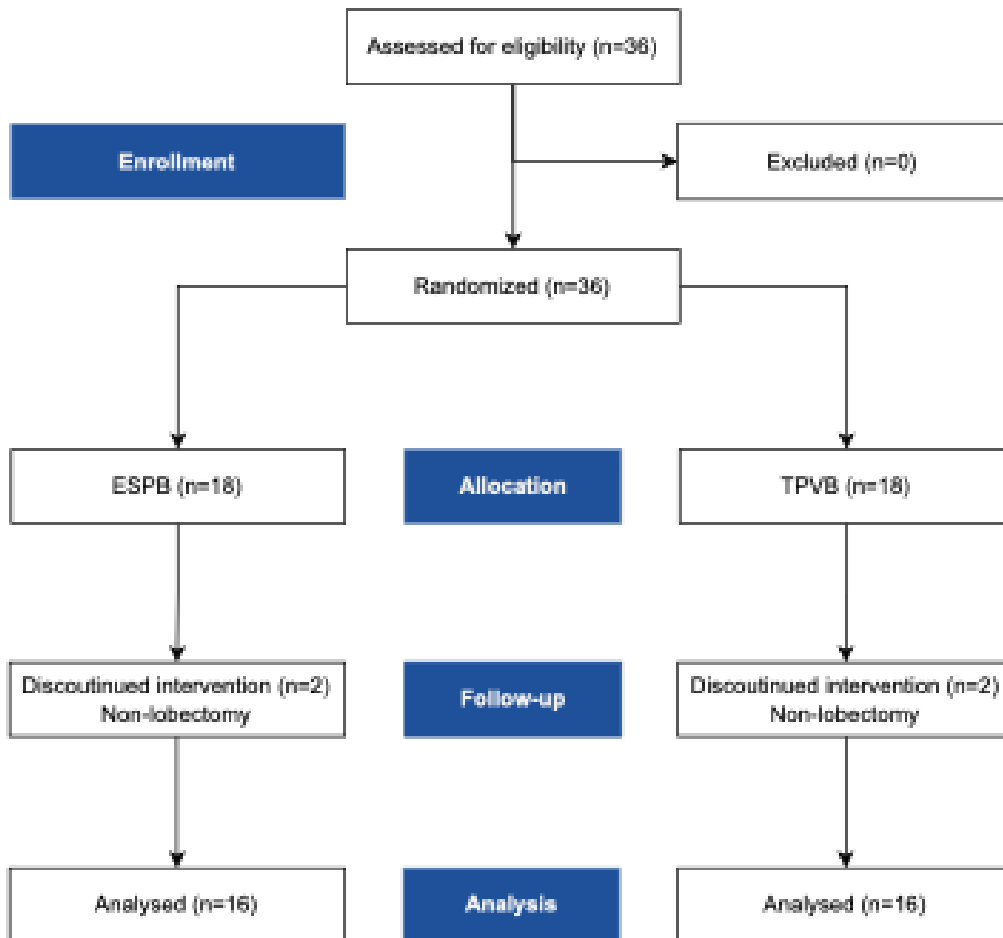


Figure 1. Consolidated Standards of Reporting Trials (CONSORT) flowchart.
Abbreviations: ESPB, erector spinae plane block; TPVB, thoracic paravertebral block.

Table 1. Baseline characteristics of the study population

Variables	ESPB (n=16)	TPVB (n=16)	P-value
Demographics			
Age, years	58.6 ± 11.1	62.4 ± 9.4	0.303
Male, n (%)	8 (50.0)	6 (37.5)	0.722
Height, cm	159.2 ± 6.0	157.2 ± 7.1	0.397
Surgical abnormalities, n (%)			
- Cancer	11 (68.8)	10 (62.5)	0.545
- Tumor	2 (12.5)	5 (31.2)	
- Node	2 (12.5)	1 (6.2)	
- Foreign object	1 (6.2)	0 (0.0)	
Comorbidities			
Hypertension, n (%)	10 (62.5)	3 (18.8)	0.029
Type 2 diabetes, n (%)	3 (18.8)	2 (12.5)	1.000
Pulmonary tuberculosis, n (%)	1 (6.2)	2 (12.5)	1.000
COPD, n (%)	0 (0.0)	1 (6.2)	1.000
Asthma, n (%)	0 (0.0)	2 (12.5)	0.484
Thyroid disease, n (%)	3 (18.8)	2 (12.5)	1.000
Physical status, n (%)			
- ASA-II	14 (87.5)	13 (81.2)	1.000
- ASA-III	2 (12.5)	3 (18.8)	

All values shown are mean (SD) or n (%) as appropriate. Abbreviations: ASA, American Society of Anesthesiologists; ESPB, erector spinae plane block; TPVB, thoracic paravertebral block.

Table 2. Anesthesia and surgical characteristics of the study population

Variables	ESPB (n=16)	TPVB (n=16)	P-value
Surgery			
Duration of surgery, min	225.1 ± 55.1	203.6 ± 39.2	0.213
Lobectomy site, n (%)			
- Left upper lobe	5 (31.2)	4 (25.0)	0.211
- Left lower lobe	4 (25.0)	1 (6.2)	
- Right upper lobe	5 (31.2)	4 (25.0)	
- Left middle lobe	2 (12.5)	3 (18.8)	
- Right lower lobe	0 (0.0)	4 (25.0)	
Lymph node dissection, n (%)	12 (75.0)	13 (81.2)	1.000
VATS convert to thoracotomy, n (%)	4 (25.0)	5 (31.2)	1.000
Regional anesthesia block			
Duration of block performance, min	7.5 (6.0-9.0)	7.5 (6.8-9.2)	0.985
General anesthesia induction			
Fentanyl use, mcg.kg ⁻¹	2.3 ± 0.8	2.7 ± 0.6	0.144
Propofol use, mg.kg ⁻¹	2.3 ± 0.8	2.6 ± 0.6	0.300
Rocuronium use, mg.kg ⁻¹	0.8 (0.8-1.0)	0.9 (0.8-1.0)	0.624
Maintenance anesthesia induction			
Duration of general anesthesia, min	293 (268-368)	310 (281-337)	0.925
Fentanyl use, mcg.kg ⁻¹	1.4 ± 1.1	1.6 ± 1.0	0.728
Free-opioid use, n (%)	3 (18.8)	1 (6.3)	0.600

All values shown are mean (SD), median (IQR), or n (%) as appropriate. VATS, video-assisted thoracic surgery. Abbreviations: ESPB, erector spinae plane block; TPVB, thoracic paravertebral block.

Table 3. Descriptive statistics of cumulative morphine (mg) requirements postoperatively

Postoperative periods	ESPB (n=16)		TPVB (n=16)		Mean difference (ESPB – TPVB) and 95% CI
	Mean ± SD	Median (IQR)	Mean ± SD	Median (IQR)	
1-hr	1.1 ± 1.4	1.0 (0.0 – 1.3)	0.5 ± 0.7	0.0 (0.0 – 1.0)	0.6 (-0.2 to 1.4)
2-hr	1.8 ± 1.6	1.0 (1.0 – 2.3)	1.0 ± 1.2	0.5 (0.0 – 2.0)	0.8 (-0.2 to 1.8)
6-hr	2.9 ± 1.7	3.0 (1.8 – 4.0)	1.4 ± 1.6	1.0 (0.0 – 2.0)	1.5 (0.3 to 2.7)
12-hr	3.5 ± 2.4	3.5 (1.8 – 4.3)	1.6 ± 1.6	1.5 (0.0 – 2.3)	1.9 (0.4 to 3.4)
24-hr	4.2 ± 3.2	4.0 (2.0 – 4.3)	1.6 ± 1.6	1.5 (0.0 – 2.3)	2.6 (0.8 to 4.4)
48-hr	4.3 ± 3.2	3.0 (2.8 – 4.3)	1.7 ± 1.5	2.0 (0.0 – 2.3)	2.6 (0.8 to 4.4)
72-hr	4.3 ± 3.2	3.0 (2.8 – 4.3)	1.7 ± 1.5	2.0 (0.0 – 2.3)	2.6 (0.8 to 4.4)
96-hr	4.3 ± 3.2	3.0 (2.8 – 4.3)	1.7 ± 1.5	2.0 (0.0 – 2.3)	2.6 (0.8 to 4.4)

Table 4. Descriptive statistics of VAS (scores) postoperatively

Postoperative periods	ESPB (n=16)		TPVB (n=16)	
	Mean $\pm$ SD	Median (IQR)	Mean $\pm$ SD	Median (IQR)
1-hr at rest	2.9 $\pm$ 1.4	3.0 (2.0 – 3.5)	1.8 $\pm$ 1.1	1.0 (1.0 – 3.0)
1-hr at coughing	4.4 $\pm$ 1.6	4.0 (3.8 – 5.3)	3.1 $\pm$ 1.2	3.0 (2.0 – 3.0)
2-hr at rest	2.7 $\pm$ 0.8	3.0 (2.0 – 3.0)	1.9 $\pm$ 0.8	2.0 (1.0 – 2.3)
2-hr at coughing	3.9 $\pm$ 1.1	4.0 (3.0 – 5.0)	3.1 $\pm$ 0.9	2.0 (2.8 – 4.0)
6-hr at rest	2.4 $\pm$ 1.0	2.0 (2.0 – 3.0)	1.8 $\pm$ 0.9	1.5 (1.0 – 2.0)
6-hr at coughing	3.6 $\pm$ 1.2	3.0 (3.0 – 4.3)	2.9 $\pm$ 1.0	3.0 (2.0 – 3.0)
12-hr at rest	2.0 $\pm$ 0.6	2.0 (2.0 – 2.3)	1.6 $\pm$ 0.8	1.5 (1.0 – 2.0)
12-hr at coughing	3.2 $\pm$ 1.0	3.0 (3.0 – 4.0)	2.9 $\pm$ 0.9	3.0 (2.0 – 3.2)
24-hr at rest	2.0 $\pm$ 0.6	2.0 (2.0 – 2.0)	1.8 $\pm$ 0.8	2.0 (1.0 – 2.0)
24-hr at coughing	3.1 $\pm$ 0.9	3.0 (3.0 – 4.0)	2.7 $\pm$ 1.1	3.0 (2.0 – 3.0)
48-hr at rest	1.3 $\pm$ 0.4	1.0 (1.0 – 1.3)	1.3 $\pm$ 0.7	1.0 (1.0 – 1.3)
48-hr at coughing	2.2 $\pm$ 0.5	2.0 (2.0 – 2.3)	2.3 $\pm$ 0.9	2.0 (1.8 – 3.0)
72-hr at rest	0.8 $\pm$ 0.5	1.0 (0.8 – 1.0)	0.5 $\pm$ 0.5	0.5 (0.0 – 1.0)
72-hr at coughing	1.4 $\pm$ 0.8	1.5 (1.0 – 2.0)	1.4 $\pm$ 0.7	1.0 (1.0 – 2.0)
96-hr at rest	0.6 $\pm$ 0.6	0.5 (0.0 – 1.0)	0.6 $\pm$ 0.9	0.0 (0.0 – 1.0)
96-hr at coughing	1.0 $\pm$ 0.5	1.0 (1.0 – 1.0)	1.3 $\pm$ 0.9	1.0 (1.0 – 1.0)

Abbreviations: *ESPB*, erector spinae plane block; *IQR*, interquartile range; *N*, number of patients; *SD*, standard deviation; *TPVB*, thoracic paravertebral block.

Table 5. Spread of local anesthetic at 6 hours and 24 hours (levels) postoperatively

Spread of local anesthetic	ESPB (n=16)		TPVB (n=16)	
	Mean $\pm$ SD	Median (IQR)	Mean $\pm$ SD	Median (IQR)
Bidirectional spread at 6-hr	3.9 $\pm$ 2.7	4.0 (1.0 – 6.0)	4.8 $\pm$ 1.8	5.0 (4.0 – 6.0)
Cephalad spread at 6-hr	1.1 $\pm$ 0.9	1.0 (0.8 – 2.0)	1.8 $\pm$ 0.9	2.0 (1.8 – 2.0)
Caudal spread at 6-hr	2.8 $\pm$ 2.3	3.0 (0.8 – 5.0)	3.0 $\pm$ 1.5	3.0 (2.0 – 4.0)
Bidirectional spread at 24-hr	5.4 $\pm$ 2.3	5.5 (4.0 – 6.5)	5.4 $\pm$ 1.6	6.0 (5.0 – 6.0)
Cephalad spread at 24-hr	1.9 $\pm$ 0.8	2.0 (1.8 – 2.0)	1.8 $\pm$ 0.7	2.0 (2.0 – 2.0)
Caudal spread at 24-hr	3.6 $\pm$ 2.0	4.0 (2.0 – 5.3)	3.7 $\pm$ 1.2	4.0 (3.0 – 4.0)

Abbreviations: ESPB, erector spinae plane block; IQR, interquartile range; N, number of patients; SD, standard deviation; TPVB, thoracic paravertebral block.

There were no adverse events associated with this study