

Table 1. Patient baseline characteristics. BMI, Body Mass Index; ASA, American Society of Anesthesiologist.

Characteristics	N(%)			P value
	Flexible bronchoscopy (204)	Rigid bronchoscopy (171)	Total (375)	
Age, median(range), year	63 (16~89)	62 (12~87)	62 (12~89)	0.70
Gender (M: F)	115:89	106:65	221:154	0.271
BMI	22.5±3.4	21.8±3.5	22.2±3.4	0.127
ASA				
II~III	156 (76.5%)	127 (74.3%)	286 (75.5%)	
IV	44(21.6%)	39 (22.8%)	84 (22.1%)	
V	4(2.0%)	5(2.9%)	9(2.4%)	0.915
Hypertension	81 (39.7%)	54(31.6%)	136(36.0%)	0.102
Diabetes	18(8.8%)	17(9.9%)	37 (9.3%)	0.711

Table 2. Etiology and location of CAO.

	N(%)			P value
	Flexible bronchoscopy	Rigid bronchoscopy	Total	
Etiology of CAO				
Lung tumor	79(38.7%)	57(33.3%)	136(36.3%)	
Esophageal cancer	45(22.1%)	42(24.6%)	87(23.2%)	
Tracheal tumor	39(19.2%)	26(15.2%)	65(17.4%)	
Scarring	25(12.3%)	23(13.5%)	48(12.8%)	
Post-placement of stenting	9(4.4%)	13(7.9%)	22(5.6%)	
Thyroid tumor	4(2.0%)	4(2.3%)	8(2.1%)	
Lymphoma	1(0.5%)	3(1.8%)	4(1.1%)	
Tuberculosis	2(1.0%)	3(1.8%)	5(1.3%)	0.418
Benign/Malignant				
Benign	72(35.3%)	45(26.3%)	117(31.2%)	
Malignant	132(64.7%)	126(73.7%)	258(68.8%)	0.062
Location of CAO				
Tracheal	130(63.7%)	120(73.2%)	250(66.7%)	
Right or left main bronchus	74(36.3%)	51(29.8%)	125(33.3%)	0.187

Table3.Perioperative adverse events.

events	N(%)			P value
	Flexible bronchoscopy	Rigid bronchoscopy	total	
Failure of ventilation	0	0	0	1.000
Bronchospasm	0	0	0	1.000
Intraoperative cough	0	0	0	1.000
Hypoxemia	8 (3.9%)	5(2.9%)	13(3.5%)	0.779
Reintubation after extubation	2(0.98%)	0	2(0.8%)	0.503

Table 4. Patients with lowest SPO₂ <95% and oxygen pressure (PO₂) during the therapy (PO₂:n=18 in flexible group and n=17 in rigid group recorded in the anesthesia note).

The lowest SPO ₂	N(%)			P value
	Flexible bronchoscopy	Rigid bronchoscopy	total	
<90%	8(3.9%)	5(2.9%)	13(3.5%)	
90%~95%	15(7.3%)	18(10.5%)	33(8.8%)	0.475
PO ₂ (mmHg)	293.2 ± 174.66	204.1 ± 158.90		0.125

Table 5. Post-operative recovery.

outcome	N(%)			P value
	Flexible bronchoscopy	Rigid bronchoscopy	total	
Ward	177	146	323(86.7%)	
ICU	27	25	52(13.3%)	0.765
Death	1	2	3(0.8%)	0.594

Table 6. Logistic regression analysis for risk factors for postoperative ICU admission.

Risk factors	COR (β -value)	SE	Wald x2	OR (95% CI)	P value
Age	0.016	0.015	1.207	1.106(0.998~1.046)	0.272
Gender	-0.292	0.336	0.755	0.746 (0.386~1.443)	0.385
ASA	-0.757	0.257	8.665	0.469(0.283~0.777)	0.003
Hypertension	0.207	0.398	0.272	1.230(0.564~2.684)	0.602
Diabetes	0.227	0.559	0.164	1.254(0.419~3.752)	0.685
Abnormal ECG	0.081	0.403	0.040	1.084(0.492~2.386)	0.841
Coronary heart disease	-0.135	0.627	0.046	0.874(0.256~2.987)	0.830
Dyspnea or orthopnea	1.057	0.400	6.995	2.878(1.315~6.298)	0.008
Lung infection	0.648	0.346	3.514	1.911(0.971~3.763)	0.061
Respiratory failure before procedure	0.545	0.423	1.664	1.725(0.753~3.952)	0.197
Cerebrovascular disease	0.080	0.543	0.022	1.083(0.374~3.139)	0.883
Benign/Malignant	-0.275	0.430	0.411	0.759(0.327~1.762)	0.552
Location of stenosis	0.494	0.413	1.431	1.640(0.729~3.686)	0.232
Flexible/rigid bronchoscope	-0.120	0.336	0.127	0.887(0.459~1.715)	0.722
Constant	-0.924	3.220	0.082	0.397	0.774