Supplementary Materials



Figure S1. Physician wearing extensive personal protective equipment. A) and B) A complete bodysuit, N95 filtering facepiece respirators, and powered air-purifying respirators with a loose-fitting hood, C) a water-proof surgical gown and N95 filtering facepiece respirators with face shield and goggles.

Table S1. Outcomes in cases wherein a C-MAC video laryngoscope was used.

	Before matching				After matching			
	Total (*n* = 627)	**PPE group (*n* = 203)**	**Control group (*n* = 424)**	***p*-value**	**Total (*n* = 607)**	**PPE group (*n* = 203)**	**Control group (*n* = 404)**	***p*-value**
First-pass success rate	535 (85.3)	179 (88.2)	356 (84.0)	0.164	520 (85.7)	179 (88.2)	341 (84.4)	0.212
Multiple attempts (≥ 3)	22 (3.5)	8 (3.9)	14 (3.3)	0.684	0.722	8 (3.9)	8 (3.9)	0.529
Glottic view								
C-L grade III or IV, (%)	40 (6.4)	32 (7.5)	8 (3.9)	0.088	38 (6.3)	8 (3.9)	30 (7.4)	0.099
Complications								
Overall complications*	99 (15.8)	41 (20.2)	58 (13.7)	0.037	97 (16.0)	41 (20.2)	56 (13.9)	0.046
EI	13 (2.1)	2 (1.0)	11 (2.6)	0.203	12 (2.0)	2 (1.0)	10 (2.5)	0.230
Dental injury	12 (1.9)	1 (0.5)	11 (2.6)	0.108	12 (2.0)	1 (0.5)	11 (2.7)	0.098
Post-intubation hypotension	42 (6.7)	27 (13.3)	42 (6.7)	<0.001	42 (6.9)	27 (13.3)	15 (3.7)	<0.001
Post-intubation hypoxemia	23 (3.7)	7 (3.4)	16 (3.8)	0.839	23 (3.8)	7 (3.4)	16 (4.0)	
Agitation	6 (1.0)	4 (2.0)	2 (0.5)	0.097	6 (1.0)	4 (2.0)	2 (0.5)	0.109
Cardiac arrest	16 (2.6)	5 (2.5)	11 (2.6)	0.922	14 (2.3)	5 (2.5)	9 (2.2)	0.855
24-h mortality	5 (0.8)	1 (0.5)	4 (0.9)	0.560	5 (0.8)	1 (0.5)	4 (1.0)	0.531

The data are presented as numbers (%).

*Overall complications include esophageal intubation, unrecognized esophageal intubation, dental injury, post-intubation hypotension, post-intubation hypoxemia, vomiting, agitation, cardiac arrest, and death within 24 h after endotracheal intubation.

PPE, personal protective equipment; C-L, Cormack and Lehane; EI, esophageal intubation.

Table S2. Relationships between outcomes and wearing PPE in cases wherein a C-MAC video laryngoscope was used.

	OR	**95% CI**	***p*-value**
First-pass success			
Wearing of PPE	0.99	0.56-1.74	0.960
Multiple attempts			
Wearing of PPE	1.21	0.45-3.26	0.707
Glottic view (C-L grade III or IV)			
Wearing of PPE	0.55	0.23-1.34	0.187
Overall complications*			
Wearing of PPE	1.51	0.95-2.41	0.083

The propensity score-matched cohort was analyzed.

The association between wearing PPE and the outcomes was evaluated using the generalized estimating equation approach with adjustment for the level of the intubator and the ETI methods.

*Overall complications include esophageal intubation, unrecognized esophageal intubation, dental injury, post-intubation hypotension, post-intubation hypoxemia, vomiting, agitation, cardiac arrest, and death within 24 h after endotracheal intubation.

OR, odds ratio; CI, confidence interval; PPE, personal protective equipment; C-L, Cormack and Lehane.