

Supplementary material

Supplementary Table 1 Comparison of mean arterial pressure (MAP, mmHg) between Group P (propofol alone) and Group PPE (propofol + phenylephrine) at predefined peri-induction and intraoperative time points

Time Point		Group P (Mean \pm SD)	Group PPE (Mean \pm SD)	p-value
Baseline		93.33 \pm 10.94	92.71 \pm 10.17	0.603
Just after induction		87.09 \pm 10.52	89.87 \pm 10.44	0.339
30 s after induction		84.98 \pm 10.70	86.95 \pm 9.40	0.429
60 s after induction		81.11 \pm 10.77	85.01 \pm 8.64	0.061
90 s after induction		77.74 \pm 11.01	83.64 \pm 8.92	0.008
120 s after induction		75.57 \pm 11.48	81.53 \pm 8.58	0.007
150 s after induction		74.38 \pm 10.59	80.63 \pm 8.88	0.004
180 s after induction		73.66 \pm 9.41	80.25 \pm 9.26	0.001
Just after intubation		97.16 \pm 12.95	104.52 \pm 15.73	0.012
60 s post-intubation		90.10 \pm 12.44	95.72 \pm 13.05	0.045
120 s post-intubation		84.96 \pm 10.54	90.06 \pm 12.28	0.028
180 s post-intubation		81.02 \pm 10.17	87.68 \pm 11.79	0.006

240 s post-intubation	78.69 ± 9.85	85.87 ± 11.34	0.004
300 s post-intubation	76.73 ± 9.68	84.10 ± 11.15	0.003
Head pinning	85.56 ± 15.93	90.89 ± 12.05	0.019
Burr hole	81.15 ± 8.93	87.26 ± 12.02	0.015
Craniotomy	79.78 ± 8.64	87.57 ± 10.89	<0.001
Bone flap removal	78.41 ± 9.29	87.29 ± 11.96	0.001
Dura opening	77.90 ± 9.76	85.15 ± 11.28	0.002
Dura closure	79.50 ± 9.16	86.99 ± 9.84	0.001
Skin suturing	79.35 ± 8.62	87.30 ± 8.87	<0.001

Overall difference in MAP over time (Generalized Estimating Equations): p < 0.001

Supplementary Table 2 Comparison of heart rate (HR, beats per minute) between Group P and Group PPE at predefined peri-induction and intraoperative time points

Time Point		Group P (Mean \pm SD)	Group PPE (Mean \pm SD)	p-value
Baseline		71.91 \pm 13.25	71.02 \pm 12.52	0.744
Just after induction		69.76 \pm 13.59	67.93 \pm 12.75	0.514
30 s after induction		69.00 \pm 12.25	66.33 \pm 12.38	0.307
60 s after induction		69.04 \pm 11.57	65.00 \pm 11.33	0.097
90 s after induction		67.82 \pm 11.09	64.87 \pm 11.30	0.214
120 s after induction		67.87 \pm 10.95	64.87 \pm 10.89	0.196
150 s after induction		67.07 \pm 11.14	65.13 \pm 10.38	0.397
180 s after induction		66.80 \pm 11.10	64.64 \pm 10.19	0.340
Just after intubation		80.89 \pm 12.03	82.33 \pm 14.85	0.613
60 s post-intubation		78.00 \pm 11.98	77.69 \pm 12.39	0.904
120 s post-intubation		75.07 \pm 11.72	73.62 \pm 10.87	0.546
180 s post-intubation		74.24 \pm 12.06	71.33 \pm 9.53	0.207
240 s post-intubation		73.20 \pm 10.96	70.93 \pm 8.61	0.278

intubation					
300	s	post-	72.89 ± 11.33	70.89 ± 9.14	0.359
intubation					
Head pinning			81.60 ± 12.65	75.93 ± 12.53	0.036
Burr hole			78.91 ± 13.81	74.11 ± 9.65	0.060
Craniotomy			76.96 ± 10.95	74.56 ± 8.72	0.253
Bone		flap	76.24 ± 10.75	73.91 ± 8.58	0.258
removal					
Dura opening			75.40 ± 11.52	73.80 ± 8.57	0.457
Dura closure			77.82 ± 13.38	74.31 ± 9.54	0.156
Skin suturing			79.87 ± 13.39	75.82 ± 9.53	0.103

Overall difference in HR over time (Generalized Estimating Equations): $p = 0.011$