

Univariable logistic regression analysis for AKI

In univariable logistic regression analyses, preoperative ASA class was significantly associated with AKI (ASA II vs ASA I: OR 9.92, 95% CI 1.14–85.94; $p=0.037$). Among perioperative factors, intraoperative blood loss was significantly associated with AKI (OR 1.22 per 100 mL increase, 95% CI 1.00–1.49; $p=0.040$). Consistent with our primary hypothesis, the duration of intraoperative hypotension was strongly associated with AKI across MAP thresholds, with increasing odds at lower MAP levels: MAP <70 mmHg (OR 1.21 per 10-min increase, 95% CI 1.05–1.38; $p=0.007$), MAP <65 mmHg (OR 1.28 per 10-min increase, 95% CI 1.05–1.55; $p=0.014$), and most prominently MAP <60 mmHg (OR 2.36 per 10-min increase, 95% CI 1.33–4.15; $p=0.003$).

Supplementary Table S1. Univariable logistic regression analysis of predictors of clinical acute kidney injury (AKI).

Predictor	OR	95% CI	p value
Demographic / baseline			
Sex (male vs female)	0.41	0.08–2.21	0.299
Age (per 1-year increase)	1.50	0.84–2.69	0.171
BMI (per 1 kg/m ² increase)	1.15	0.98–1.35	0.090
ASA class (ASA II vs ASA I)	9.92	1.14–85.94	0.037
Perioperative factors			
Operative duration (per 1-hour increase)	1.32	0.57–3.07	0.520
Intraoperative fluid rate (per 1 mL/kg/h increase)	0.89	0.57–3.37	0.399
Blood loss (per 100 mL increase)	1.22	1.00–1.49	0.040
Perioperative blood transfusion (yes vs no)	1.83	0.34–9.90	0.481
Preoperative anemia (yes vs no)	2.89	0.47–17.65	0.251
Intraoperative hypotension			
Time with MAP <70 mmHg (per 10-min increase)	1.21	1.05–1.38	0.007
Time with MAP <65 mmHg (per 10-min increase)	1.28	1.05–1.55	0.014
Time with MAP <60 mmHg (per 10-min increase)	2.36	1.33–4.15	0.003
AKI, acute kidney injury; ASA, American Society of Anesthesiologists; BMI, body mass index; CI, confidence interval; MAP, mean arterial pressure; OR, odds ratio.			