

## Supporting Information

**Table S1** Baseline and intraoperative regional cerebral oxygen saturation (rSO<sub>2</sub>) data.

**Table S2** Intraoperative anaesthetic and postoperative clinical variables.

**Table S3** Perioperative hemodynamics and laboratory variables immediate after surgery.

**Table S1** Baseline and intraoperative regional cerebral oxygen saturation (rSO<sub>2</sub>) data.

<b>Cerebral Saturation Data</b>	<b>Magnesium group (n=32)</b>	<b>Control group (n=37)</b>	<b>P value</b>
<b>Left</b>			
Baseline rSO <sub>2</sub> at admission to OR (%)	67.0 ± 7.8	66.1 ± 8.0	0.654
Lowest rSO <sub>2</sub> (%)	57.6 ± 12.3	57.7 ± 11.5	0.985
Highest rSO <sub>2</sub> (%)	81.8 ± 8.2	81.2 ± 9.8	0.767
<b>Right</b>			
Baseline rSO <sub>2</sub> at admission to OR (%)	57.6 ± 12.3	57.7 ± 11.5	0.985
Lowest rSO <sub>2</sub> (%)	57.1 ± 11.9	54.3 ± 10.8	0.320
Highest rSO <sub>2</sub> (%)	81.4 ± 8.5	80.1 ± 9.7	0.558

OR, operating room.

Values are mean ± SD.

**Table S2** Intraoperative anaesthetic and postoperative clinical variables.

	<b>Magnesium group (n=32)</b>	<b>Control group (n=37)</b>	<b>P value</b>
Crystalloids (ml)	592.8 ± 561.1	712.2 ± 508.2	0.357
Colloids (ml) intraoperatively	0	0	
Estimated blood loss (ml)	119.4 ± 112.8	164.3 ± 227.5	0.314
Transfused packed red blood cells, n (%) (units)	3 (9.4%) (1.3)	6 (16.2%) (1.2)	0.400
Urine (ml)	158.9 ± 214.7	174.6 ± 275.5	0.795
Propofol, induction (mg)	127.5 ± 19.2	123.2 ± 19.0	0.359
Remifentanyl, total (mcg)	221.1 ± 148.4	314.6 ± 181.9	0.024
Rocuronium induction (mg)	47.7 ± 4.6	48.4 ± 3.7	0.473
Rocuronium added dose, n (%)	8 (25%), 4.7 ± 10.9	13 (30.4%), 8.2 ± 13.5	0.238
Ephedrine (mg)	(n=2) 0.5 ± 2.0	(n=3) 0.4 ± 1.6	0.875
Phenylephrine (mcg)	(n=11) 35.0 ± 66.2	(n=10) 26.2 ± 50.6	0.535
Magnesium at admission preoperative	1.96 ± 0.41	2.03 ± 0.20	0.361
Magnesium at the end of surgery (mg.dl <sup>-1</sup> ) (normal range: 1.6–2.6)	2.68 ± 0.32	1.95 ± 0.22	0.000
Admitted to ICU after this surgery, n (%)	12 (37.5%)	12 (32.4%)	0.659
Median days LOS (range, IQR)**	13.5 (4–35, 11–19)	13 (8–35, 11–20)	
In-hospital case-fatality rate, n (%)	0	0	
<b>Discharge destination, n (%)</b>			
Home	11 (34.4%)	6 (16.2%)	0.081
Other hospital or Rehabilitation	21 (65.6%)	31 (83.8%)	
<b>Level of activity at discharge</b>			
Ambulation	17 (53.1%)	13 (35.1%)	0.065
Wheelchair accessible	12 (37.5%)	15 (40.5%)	
Need bed rest	3 (9.4%)	9 (24.3%)	

LOS, length of stay.

Values are mean ± SD.

**Table S3** Perioperative hemodynamics and laboratory variables immediate after surgery.

	<b>Magnesium group (n=32)</b>	<b>Control group (n=37)</b>	<b>P value</b>
Initial SpO <sub>2</sub> (%)	98.3 ± 2.7	97.5 ± 4.4	0.377
Initial SBP (mmHg)	142.3 ± 27.7	145.3 ± 23.9	0.630
Mean SBP (mmHg)	121.6 ± 17.1	121.4 ± 13.6	0.948
Initial DBP (mmHg)	74.7 ± 12.0	75.7 ± 14.2	0.757
Mean DBP (mmHg)	70.9 ± 10.3	68.8 ± 9.4	0.372
Initial MBP (mmHg)	89.9 ± 21.0	92.8 ± 14.5	0.505
Mean MBP (mmHg)	84.0 ± 11.2	83.7 ± 9.7	0.899
Initial HR (beats.minute <sup>-1</sup> )	89.2 ± 24.0	89.1 ± 18.8	0.993
Mean HR (beats.minute <sup>-1</sup> )	86.9 ± 13.1	82.9 ± 13.9	0.215
Mean EtCO <sub>2</sub> (mmHg)	32.6 ± 2.5	32.4 ± 2.8	0.746
Hematocrit (%) preoperative	34.5 ± 6.8	32.2 ± 7.2	0.189
Hematocrit (%) postoperative	34.5 ± 7.2	32.6 ± 5.2	0.231
Calcium total (mg.dl <sup>-1</sup> ) postoperative	8.35 ± 0.62	8.33 ± 0.62	0.891
Lactic acid (mmol.l <sup>-1</sup> ) postoperative	1.97 ± 1.19	2.20 ± 1.01	0.432
pH	7.39 ± 0.46	7.41 ± 0.06	0.199
pO <sub>2</sub> (mmHg)	149.3 ± 40.5	144.7 ± 38.8	0.749
pCO <sub>2</sub> (mmHg)	37.3 ± 4.5	35.7 ± 6.4	0.413
HCO <sub>3</sub> (mmol.l <sup>-1</sup> )	22.8 ± 1.8	22.9 ± 2.2	0.937

SBP, systolic blood pressure; DBP, diastolic blood pressure; MBP, mean blood pressure; HR, heart rate.

Values are mean ± SD.