



Rocuronium action can be affected by hyperventilation: a case report and computational simulation

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Supplementary file 1. The neuromuscular monitor records

Table 1 *The neuromuscular monitor records*

Session	Time (elapsed)	Mode	Current (mA)	Pulse width (μ sec)	Response (mV)
9th (normal ventilation)					
	0:00:11	CAL	50	300	8.42
	0:00:13	TOF	50	300	8.29, 8.32, 8.36, 8.50
	0:00:33	TOF	50	300	8.15, 8.05, 7.94, 7.86
	0:00:53	TOF	50	300	7.59, 7.61, 7.54, 7.52
	0:01:13	TOF	50	300	6.59, 6.05, 5.81, 5.71
	0:01:33	TOF	50	300	5.41, 4.36, 4.02, 3.96
	0:01:53	TOF	50	300	3.60, 2.02, 1.48, 1.43
	0:02:13	TOF	50	300	2.09, 0, 0, 0
	0:02:33	TOF	50	300	1.49, 0, 0, 0
	0:02:53	TOF	50	300	0, 0, 0, 0
10th (hyperventilation)					
	0:00:08	CAL	60	200	6.79
	0:00:11	TOF	60	200	6.99, 6.94, 6.99, 7.00
	0:00:31	TOF	60	200	6.87, 6.89, 6.80, 6.86
	0:00:51	TOF	60	200	6.81, 6.78, 6.87, 6.84
	0:01:11	TOF	60	200	7.01, 7.16, 7.07, 7.01
	0:01:31	TOF	60	200	7.03, 6.62, 6.25, 6.32
	0:01:51	TOF	60	200	5.76, 4.27, 3.80, 3.76
	0:02:11	TOF	60	200	3.17, 1.62, 1.14, 1.13
	0:02:31	TOF	60	200	1.60, 0, 0, 0
	0:02:51	TOF	60	200	0, 0, 0, 0

Supplementary file 2. The ionic species existence ratio of rocuronium

Table 2 *The ionic species existence ratio of rocuronium*

pH	a (%)	b (%)	c (%)
5.00	0.20	99.80	0.00
5.20	0.32	99.68	0.00
5.40	0.51	99.49	0.00
5.60	0.81	99.19	0.00
5.80	1.27	98.73	0.00
6.00	2.00	98.00	0.00
6.20	3.14	96.86	0.00
6.40	4.88	95.12	0.00
6.60	7.52	92.48	0.00
6.80	11.42	88.58	0.00
7.00	16.97	83.03	0.00
7.20	24.47	75.53	0.00
7.40	33.92	66.08	0.00
7.60	44.86	55.14	0.00
7.80	56.32	43.68	0.00
8.00	67.15	32.85	0.00
8.20	76.41	23.59	0.00
8.40	83.70	16.30	0.00
8.60	89.05	10.94	0.00
8.80	92.80	7.20	0.00
9.00	95.33	4.66	0.00
9.20	97.00	2.99	0.00
9.40	98.09	1.91	0.00
9.60	98.78	1.21	0.00
9.80	99.23	0.77	0.00
10.00	99.51	0.49	0.01

The symbols on the table correspond to the ion symbols in Figure 2.