

Supplemental Digital Content 2. Additional Results

Table 1. Work of Breathing Performed by the Ventilator and Pressure-time Products in Controls

		Baseline	1 h MV	2 h MV	Group Effects
WOB [cmH ₂ O · mL]	<i>STP_{low}</i>	6.5 ± 1.5	7.1 ± 1.7	8.6 ± 2.0	
	<i>STP_{mid}</i>	5.6 ± 1.4	6.0 ± 1.1	6.1 ± 1.3	ns
	<i>STP_{high}</i>	6.7 ± 3.2	6.8 ± 2.1	5.2 ± 2.6	
PTP_{aw} [cmH ₂ O · s]	<i>STP_{low}</i>	7.5 ± 0.9	7.7 ± 1.6	7.9 ± 1.4	
	<i>STP_{mid}</i>	7.6 ± 0.2	8.1 ± 0.5	8.5 ± 0.3	<i>p</i> < 0.001 <i>STP_{low}</i> vs. <i>STP_{mid}</i>
	<i>STP_{high}</i>	7.7 ± 0.5	9.3 ± 0.4	9.7 ± 0.8	<i>p</i> < 0.001 <i>STP_{mid}</i> vs. <i>STP_{high}</i>
PTP_L [cmH ₂ O · s]	<i>STP_{low}</i>	1.5 ± 0.4	2.2 ± 3.5	1.1 ± 1.4	
	<i>STP_{mid}</i>	1.5 ± 0.5	2.0 ± 0.9	2.5 ± 0.7	ns
	<i>STP_{high}</i>	1.7 ± 0.8	2.0 ± 1.3	2.9 ± 1.0	

Data are given as mean ± SD.

I:E = inspiratory-to-expiratory; MV = mechanical ventilation; ns = not significant; PTP_{aw} = airway pressure vs. time product; PTP_L = transpulmonary pressure vs. time product; STP_{high} = high level of stress vs. time product (I:E = 2:1); STP_{low} = low level of stress vs. time product (I:E = 1:2); STP_{mid} = middle level of stress vs. time product (I:E = 1:1); WOB = work of breathing performed by the ventilator. Comparisons among groups were performed by means of two-way ANOVA on ranks, to account for unequal variances between groups, with *p*-value adjustment acc. to the Bonferroni-Holm method. Mechanical ventilation at baseline was performed with an I:E ratio of 1:1 in all groups.

Table 2. DAD Score in Controls

		Median	Q₁-Q₃
Alveolar Edema [0-16]	<i>STP_{low}</i>	1.0	0.25 – 2.5
	<i>STP_{mid}</i>	2.5	1.0 – 6.5
	<i>STP_{high}</i>	1.0	1.0 – 3.0
Hemorrhage [0-16]	<i>STP_{low}</i>	3.5	1.5 – 5.5
	<i>STP_{mid}</i>	3.0	1.5 – 5.25
	<i>STP_{high}</i>	4.0	1.0 – 5.0
Inflammatory Infiltration [0-16]	<i>STP_{low}</i>	1.5	1.0 – 2.75
	<i>STP_{mid}</i>	2.0	1.75 – 4.0
	<i>STP_{high}</i>	1.0	1.0 – 4.0
Overdistension [0-16]	<i>STP_{low}</i>	5.5	2.75 – 10.5
	<i>STP_{mid}</i>	7.5	5.25 – 8.25
	<i>STP_{high}</i>	4.0	3.0 – 6.0
DAD Score [0-64]	<i>STP_{low}</i>	9.0	7.25 – 20.5
	<i>STP_{mid}</i>	15.5	13.5 – 18.0
	<i>STP_{high}</i>	11.0	6.0 – 14.0

Data are presented as median (Q₁-Q₃: interquartile range). Statistical analysis was performed using Kruskal-Wallis tests. Diffuse alveolar damage (DAD) score ranged from 0-16 points. Score values were determined by multiplying characteristic extent by characteristic severity. The cumulated DAD score was calculated by adding the scores obtained for each individual characteristic and ranged from 0-64.

I:E = inspiratory-to-expiratory; STP_{high} = high levels of stress vs. time product (I:E 2:1);
STP_{low} = low level of stress vs. time product (I:E 1:2); STP_{mid} = middle level of stress vs. time
product (I:E 1:1).