ABSTRACT

INTRODUCTION: The Maximum Oxygen Consumption ($\text{VO}_{2\text{max}}$) and Ventilatory anaerobic threshold (VT), is measured using progressive exercise protocol until exhaustion, these results can be affected by a previous submaximum exercise. **PURPOSE:** The purpose of this study was evaluate the reproducibility of maximum effort test after a submaximum exercise. **METHODS:** 19 subjects (mean ± SD; age, 21.8±2.5 years; body mass, 71.0±10.6 and height, 175.2±8.1) participated in this study. During two days of assessment separately for at least 24h recovery subjects performed the following tests: Day 1 a maximum effort test and a submaximum exercise at 80% of $\text{VO}_{2\text{max}}$. Day 2 the order of the tests performed on day 1 was reversed. **RESULTS:** No significant differences were found in the $\text{VO}_{2\text{max}}$ or ventilatory thresholds determined in both tests of maximum effort. ($\text{VO}_{2\text{max}}$ 54.2 ± 6.8 vs 55.1 ± 6.4 (ml·kg\(^{-1}\)·min\(^{-1}\)) ICC; 0.91, CV; 3.9 ± 2.1); ($\text{VO}_{2\text{RCT}}$ 45.6 ± 6.4 vs 45.9 ± 5.7 (ml·kg\(^{-1}\)·min\(^{-1}\)) ICC; 0.96, CV; 3.0 ± 2.1) ($\text{VO}_{2\text{VT}}$ 35.6 ± 4.7 vs 35.6 ± 4.7 (ml·kg\(^{-1}\)·min\(^{-1}\)) ICC; 0.87, CV; 4.9 ± 3.9). **CONCLUSION:** The results of the present study showed a high reproducibility of the data obtained when maximum effort test is assessed (i.e., $\text{VO}_{2\text{max}}$ and ventilatory threshold), regardless the submaximum exercise.