S3 table. Yearly change in absolute and in percentage of estimated baseline for gas exchange, peak minute ventilation and heart rate and ratio between peak minute ventilation and maximal voluntary ventilation.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Airflow obstruction | | Smoking control | | Never smoking control | | ANOVA p | |
|  | change/year | %change/year | change/year | % change/year | change/year | % change/year | change/year | % change/year |
| Cardiovascular fitness |  |  |  |  |  |  |  |  |
| VO2peak (ml/min) | -67±55¥ | -3.0±2.2¥ | -76±59¥ | -3.3±2.3¥ | -58±63¥ | -2.4±2.6¥ | 0.33 | 0.18 |
| VO2peak (ml/min/kg) | -0.79±0.69¥ | -2.8±2.3¥ | -1.04±0.83¥ | -3.3±2.4¥ | -0.81±0.95¥ | -2.4±2.7¥ | 0.32 | 0.19 |
| HRpeak (beats/min) | -2.95±2.79¥ | -2.0±2.0¥ | -2.53±2.25¥ | -1.7±1.5¥ | -1.62±2.73¥# | -1.0±1.8¥# | 0.04 | 0.02 |
| HRpeak (beats/min) - no βBlocker | -3.18±2.54¥ | -2.2±1.8¥ | -2.42±2.04¥ | -1.5±1.3¥ | -1.39±2.24¥# | -0.9±1.4¥# | <0.01 | <0.01 |
| OUES (slope) | -32±62¥ | -1.1±2.7¥ | -67±63¥ | -2.3±2.0¥ | -69±88¥# | -2.3±3.0¥ | 0.04 | 0.05 |
| Pulmonary ventilation |  |  |  |  |  |  |  |  |
| VEpeak (l/min) | -3.25±2.91¥ | -3.7±2.8¥ | -2.85±2.37¥ | -3.5±2.7¥ | -2.22±2.28¥ | -2.7±2.6¥ | 0.13 | 0.15 |
| VE/MVV (%) | -1.4±2.9¥ | -1.5±4.0¥ | -1.3±2.4¥ | -1.8±3.6¥ | -0.11±2.6₤ | 0.1±4.4† | 0.03 | 0.03 |
| ∆VE/∆VCO2 (slope) | 0.09±0.41 | 0.3±1.3 | 0.11±0.53 | 0.5±1.9 | 0.16±0.48¥ | 0.8±1.9¥ | 0.75 | 0.51 |
| Muscle work |  |  |  |  |  |  |  |  |
| WRpeak (watt) | -6.3±4.70¥ | -4.0±2.8¥ | -6.4±3.94¥ | -3.7±2.13¥ | -4.2±3.74¥#† | -2.5±2.11¥#† | 0.01 | <0.01 |
| ∆VO2/∆WR (slope) | 0.10±0.35 | 1.2±3.6¥ | -0.10±0.46 | -0.6±3.8 | 0.01±0.33 | 0.3±3.0 | 0.07 | 0.06 |
| Effort indicators |  |  |  |  |  |  |  |  |
| RERpeak | -0.011±0.02¥ | -0.9±1.4¥ | -0.006±0.02¥ | -0.5±1.4¥ | -0.006±0.02¥ | -0.4±1.7 | 0.41 | 0.35 |
| Dyspnea (BORG score) | -0.06±0.38 | - | -0.14±0.39¥ | - | -0.09±0.39 | - | 0.60 | - |
| Fatigue (BORG score) | -0.14±0.41¥ | - | -0.16±0.35¥ | - | -0.11±0.36¥ | - | 0.77 | - |

Data are expressed as mean estimate±SD; VO2peak= peak oxygen uptake, ml/min/kg= milliliter per minute per kilogram, HRpeak= peak heart rate, ‘no βBlocker’ refers to the subgroups of subjects who were not under beta blocker medication at any of the visits (Airflow obstruction n=23, Smoking control n= 32, Never smoking control n = 43), OUES= oxygen efficiency slope, VEpeak= peak minute ventilation, VE/MVV= ventilatory reserve, ∆VE/∆VCO2 = ventilatory efficiency slope, WRpeak= peak work rate, ∆VO2/∆WR = mechanical efficiency, RERpeak= peak respiratory exchange ratio. ¥= statistically significant yearly change; #= statistically different from airflow obstruction; †= statistically different from smoking control; ₤= post hoc indicates a trend for statistically significant difference (p= 0.05) between never smoking control and airflow obstruction groups.