Supplemental material

Materials and methods

Study subjects

Chronic HP patients were excluded if aged > 75 years-old, had forced vital capacity (FVC) and / or $FEV_1 < 30\%$ of predicted, smoked > 20 pack-years, had a prior diagnosis of asthma or COPD, had signs of pulmonary arterial hypertension through echocardiography or right heart catheterisation, used supplemental oxygen, or had musculoskeletal disorders, heart disease, or any other disabling condition that could interfere with the tests. The patients were clinically stable for at least 6 weeks.

Cardiopulmonary exercise testing

The following respiratory, metabolic and cardiovascular variables were monitored during the pre-exercise phase during the test and in the recovery phase: work (watts), \dot{V} O2 max (maximum oxygen consumption), \dot{V} CO2 (carbon dioxide production), RER (respiratory quotient), \dot{V} E (minute ventilation), V_T (tidal volume), ventilatory reserve (%MVV), heart rate (HR) and chronotropic reserve (peak HR *versus* maximum HR predicted for age) and oxygen pulse (\dot{V} O2 / HR). SpO₂, blood pressure and a 12-lead electrocardiogram were continuously monitored.

Before the beginning of the effort, the subjects remained for 2 minutes without pedalling and, after the test, they were kept under observation for 2 minutes for

recovery. The incremental rate at each minute was selected according to exercise capacity of each patient.

The test was interrupted when arterial hypertension developed (systolic blood pressure above 220 mmHg and / or diastolic blood pressure above 120 mmHg), if there was a drop in systolic blood pressure > 10 mmHg, occurrence of previously non-existent cardiac arrhythmia, acute cardiac ischemic changes, dizziness, syncope or mental confusion, precordial pain, peripheral oxygen saturation drop below 80%, or inability to maintain pedal rotation above 50 rpm.

Figure E1

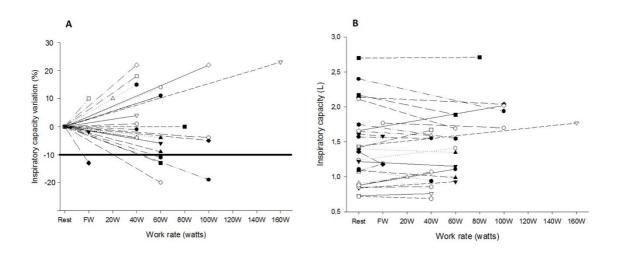


Figure E1 – Inspiratory capacity variation (in percentage – Figure E1 - A; and in liters – Figure E1 - B) in relation to work rate at peak effort compared to baseline levels in

chronic HP patients. 5 of 27 patients (18%) had an IC decrease above 10% at peak exercise.