Journal of Respiratory and CardioVascular Physical Therapy

Dear Readers,

It is a pleasure to present the new edition of the **Journal of Respiratory and CardioVascular Physical Therapy**. This issue brings three original manuscripts performed in Brazil that address different features in respiratory and cardiovascular systems submitted to exercise conditions. Each one deals with a specific population - obese patients, female professional soccer athletes, and individuals with a risk factor for cardiovascular disease (CVD). In this way, all of them offer essential information about exercise prescription to physical therapy professionals mainly. Both for subjects with clinical conditions or a risk factor for CVD and athletes performance improvement during sports practice.

The first article is a prospective and cross-sectional study that evaluated 16 professional soccer players women during a cardiopulmonary exercise test (CPET) in a treadmill, in which ventilatory and metabolic variables were measured. Entitled as **"Correlation between maximum inspiratory pressure (MIP) and peak oxygen uptake (VO2peak) in female professional soccer athletes"**, this article aimed to evaluate the correlation between the inspiratory muscle strength and VO2peak. An inversely proportional correlation between them was found, and the authors conclude that inspiratory muscle strength did not influence VO2peak significantly.

The second article entitled **"Evaluation of chest wall kinematics during rest and respiratory muscle endurance in obese patients"** aimed to evaluate lung volumes and the contribution of chest wall compartments during quiet breathing and MVV maneuver, as well as the presence of asynchrony and distortion between chest wall compartments in obese subjects. The authors conclude that the central adiposity interferes negatively in the contribution of the rib cage abdominal compartment to ventilation, which reduces the

adaptation to exertion. Besides, chest wall kinematics at rest is altered due to adiposity distribution in these subjects compared to eutrophic individuals.

The last article of this number brings us a useful, simple, and low-cost alternative for determining ventilatory anaerobic threshold (VAT). Entitled **"Determination of the Ventilatory Anaerobic Threshold by the response of the heart rate of individuals with risk factor for cardiovascular diseases: comparison with a visual method"**, this study analyzed 26 volunteers during a cardiopulmonary exercise test (CPET) on a treadmill. The gold standard to obtain the VAT is the visual analysis of the curves obtained from the ventilatory variables of the CPET. Therefore, the authors observed the HR response by the heteroscedastic statistical model compared to the visual method and they found strong correlations between the variables time, VO_2, HR and power in both methods. Thus, the authors showed that HR response seems to be an adequate model for determining the VAT in these subjects.

Finally, this issue is full of fresh and updated knowledge about cardiovascular and respiratory adaptations to exercise, becoming an excellent data source for professionals and students of physical therapy.

Thus, keep contributing to science, submitting your manuscripts to our journal, and welcome to the ninth volume of the *Journal of Respiratory and Cardiovascular Physical Therapy*!

Best Regards,

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