

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 different cities of Brazil, showing the high research capacity in the areas of respiratory and cardiovascular physiotherapy. This edition addresses different types of assessment and disease treatment. It is important to note that all three manuscripts published in this number were performed in populations that the disease brings great impact on public health due to high prevalence or expenses to the health systems, such as sleep apnea, obesity, and cardiac surgery.

The first article is a pilot study that involves patients with untreated severe obstructive sleep apnea (OSA). This research, entitled “**Correlation Between Desaturation Indices of Oxygen Saturation Variability in Severe Obstructive Sleep Apnea: A Pilot Study**”, aimed to investigate whether the proposed method for overnight pulse oximetry (SpO₂V) analysis is reliable for OSA screening. The authors concluded that the analysis of SpO₂V recorded by overnight pulse oximetry provides parameters which positively correlate with apnea-hypopnea index, oxygen desaturation index and cumulative time spent below 90% indexes; the obtained SpO₂V indexes were able to discriminate severe OSA patients with high diagnostic accuracy level. .

The second article entitled “**Effects of Muscular Hypertrophy and Aerobic Training in Obese Submitted to Bariatric Surgery**” aimed to assess muscle strength, functional capacity and body composition in 18

obese subjects after bariatric surgery. The authors found significant increase in overall and localized muscle strength and improvement in functional performance after a supervised program of muscle hypertrophy and aerobic exercise for 36 weeks, two days/week.

The last article of this number, entitled **“Volumetric Incentive Spirometer and Positive Pressure After Cardiac Surgery”**, aimed to evaluate the effectiveness of incentive spirometry associated to positive end-expiratory pressure technique (PEEP) when compared to non-invasive ventilation with two pressure levels on the incidence of potential pulmonary complications in postoperative cardiac surgery period. In this randomized clinical trial, the authors found that when comparing non-invasive ventilation to incentive spirometry associated with positive end-expiratory pressure (PEEP) or respiratory exercises, there was no significant difference between the techniques regarding pulmonary complications.

Finally, we invite you to continue to contribute with enthusiasm and perseverance in this fascinating area of science sending your contribution to our journal.

We wish you all enjoy the reading

Rodrigo Torres-Castro

Guilherme A F Fregonezi