11/14/2016

**Guilherme Fregonezi**

Editor-in-Chief

*Journal of Respiratory and Cardiovascular Physical Therapy -JRCVPT*

Dear Editor:

Please find enclosed our manuscript entitled “A Comparison of Positive Versus Negative Pressure Oscillation in Secretion Clearance Chest Physiotherapy for Obese Patients on Mechanical Ventilation: A Prospective Crossover Trial,” which we request you to consider for publication as an *Original Research Article* in*Journal of Respiratory and Cardiovascular Physical Therapy -JRCVPT***.**

Patients who require mechanical ventilation are at risk of retained secretions, which is associated with significantly higher mortality and morbidity. Secretion clearance chest physiotherapy can be achieved with positive or negative pressure oscillation therapy, but the effectiveness of these therapies in obese patients has not previously been compared. In this study, using a crossover design, we compared the two therapies in eight obese patients on mechanical ventilation in the ICU. We measured changes in the P/F ratio, PaCO2, VCO2, and tidal volume. Both therapies showed significant improvements, but positive pressure oscillation therapy showed significantly greater improvements, perhaps due to the effects of adipose tissue in obese patients, which work against the negative pressure oscillations. Our results suggest that positive pressure oscillation therapy should be considered as first-line secretion clearance therapy for obese patients on mechanical ventilation.

This manuscript has not been published elsewhere and is not under consideration by another journal. I/We have approved the manuscript and agree with submission to *JRCVPT*. There are no conflicts of interest to declare.

We believe that the findings of this study are relevant to the scope of your journal and will be of interest to its readership. The manuscript has been carefully reviewed by an experienced editor whose first language is English and who specializes in editing papers written by scientists whose native language is not English.

We look forward to hearing from you at your earliest convenience.

– Name and location of the institution where the study was performed:

Hokkaido University Hospital Emergency and critical Care center

N15W7 Kita-ku Sapporo 060-8638 JAPAN.

TEL 011-706-7377. FAX 011-706-7378

– Name, date, and location of any meeting or forum where research data were previously presented, and who presented:

This research data has not been published and presented elsewhere.

– Sources of financial support:

Financial support for this study was not provided by any company, foundation, or any other funding source.

– Conflict of interest statement. If no potential conflicts of interest exist, a statement to this effect must be included:

The authors report no conflicts of interest.

Sincerely,

Susumu Nakahashi

Department of Emergency and Critical Care Center

Mie University Hospital

2-174, Edobashi, Tsu-shi

Mie 5148507, Japan

TEL: +81-(0)59-232-1111 FAX: +81-(0)59-231-5227

Ext:5342

mail:n14w4@s3.dion.ne.jp