

## بسم الله الرحمن الرحيم









شبكة المعلومات الجامعية التوثيق الالكتروني والميكروفيلم





## جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

### قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها علي هذه الأقراص المدمجة قد أعدت دون أية تغيرات



يجب أن

تحفظ هذه الأقراص المدمجة يعيدا عن الغيار











بالرسالة صفحات لم ترد بالأصل



## Blood Gases Response to Different Body Positions in Patients with Chronic Obstructive Pulmonary Disease in Intensive Care Unit

BICATO

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B.Sc. PT. (1989)

# A Thesis Submitted in Partial Fulfillment for the Requirement of the Master Degree in Physical Therapy

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## ﴿ بسم الله الرحمن الرحيم ﴾

## " فَأَمَّا الزَّبَدُ فَبَذْهَبُ جُفَاء

وَأَمَّا مَا بَنِفَعُ النَّاسَ فَبَمْكُثُ فِي الْأَرْضِ

صدق الله العظيم

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**Khaled Mohamed Assem** 

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## DEDICATION

To The Spirit
Of My Father

Blood Gases Response to Different Body Positions in Patients with Chronic Obstructive Pulmonary Disease in Intensive Care Unit.

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#### **Abstract**

The purpose of this study was to evaluate blood gases response to different body positions in patients with chronic obstructive pulmonary disease in intensive care unit. Fifty four chronic obstructive pulmonary disease patients, stage III, with mean age  $65 \pm 5.35$  years participated in this study. Three blood samples was drawn from each patient at base line supine position, at side lying position and at prone position, with interval of 2 hours between each sample. Physical therapy program was performed to the patient at each position. The results showed that there was highly significant improvement of blood gases (PaO<sub>2</sub>, SaO<sub>2</sub>), at prone position and statistically significant improvement of prone position with statistically significant differences between prone lying position and side lying and supine lying positions. From the obtained results in this study, it can be concluded that prone lying position may represent a beneficial therapeutic modality to improve blood gases in chronic obstructive pulmonary disease patients in intensive care unit.

#### List of Abbreviations

ABG	Arterial Blood Gases
AECOPD	Acute Exacerbation of Chronic Obstructive
	Pulmonary Disease
ATP	Adenosine Triphosfate
bpm	Beat Per Minute
brpm	Breath Per Minute
COPD	Chronic Obstructive Pulmonary Disease
CRP	Creative Protein
ECG	Electro Caridio Graphy
FEV <sub>1</sub>	Forced Expiratory Volume in 1 Second
Fig	Figure
FiO <sub>2</sub>	Fraction of Inspired Oxygen
FVC	Forced vital Capacity
HCO <sub>3</sub>	Arterial Blood Bicarbonate
HR	Heart Rate
ICU	Intensive Care Unit
LTB4	Leukotrin B4
MAP	Mean Arterial Pressure
mmHg	Mellimeter Mercury
NO <sub>2</sub>	Nitrogen Dioxide
<b>O</b> 3	Ozone
PaCO2	Arterial Carbondioxide Pressure
PA	Alveolar Pressure
PaO2	Arterial Oxygen Pressure
PEEP	Positive End-Expiratory Pressure
pН	Hydrogen Ion concentration
PPı	Pleural Pressure
RR	Respiratory Rate
TNF	Tumor Necrosis Factor
SaO2	Arterial Oxygen Saturation
SLPI	Secretory leukoprotenase inhibitor
SO <sub>2</sub>	Sulpur Dioxide
V/Q	Ventilation / Perfusion Ratio

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