



شبكة المعلومات الجامعية
التوثيق الإلكتروني والميكرو فيلم

بسم الله الرحمن الرحيم



HANAA ALY



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شبكة المعلومات الجامعية التوثيق الإلكتروني والميكروفيلم



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جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

قسم

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تحفظ هذه الأقراص المدمجة بعيدا عن الغبار



HANAA ALY



Outcomes of COPD Patients in RICU Ain Shams University Hospital and ICU Mansura Chest Hospital

Thesis

Submitted for Partial Fulfillment of Master Degree in Chest Diseases

By

Aya Kamal Abd EL Monem

M.B.B.Ch, Faculty of Medicine-Mansoura University

Under supervision of

Prof. Mohammad Abd El Sabour Faramawy

Professor of Chest Diseases

Faculty of Medicine – Ain Shams University

Prof. Dr. Tamer Mohamed Ali

Professor of Chest Diseases

Faculty of Medicine – Ain Shams University

*Faculty of Medicine
Ain Shams University*

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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

قَالَ

سَبِّحْ اِنَّكَ لَا تَعْلَمُ لَنَا
اِلَّا مَا عَلَّمْتَنَا اِنَّكَ اَنْتَ
الْعَلِيمُ الْعَظِيمُ

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List of Abbreviations

Abb.	Full term
ABG	Arterial blood gases
AC	Assist control
APRV.....	Airway pressure release ventilation
ARDS	Adult respiratory distress syndrome
ARF.....	Acute respiratory failure
BODE	Body mass index, Obstruction, Dyspnea, and Exercise
CBC	Complete blood count
CESAR.....	Conventional ventilatory support versus Extracorporeal membrane oxygenation for Severe Acute Respiratory failure
CHF	Congestive heart failure
CO ₂	Carbon dioxide
COPD.....	Chronic obstructive pulmonary disease
COVID-19.....	Coronavirus disease 2019
CPAP	Continuous positive airway pressure
CT	Computed tomography
DPI.....	Dry powder inhaler
ECG	Electrocardiography
ECMO	Extracorporeal membrane oxygenation
FEV ₁	Forced expiratory volume in 1 second
FVC.....	Forced vital capacity
GOLD	Global Initiative for Chronic Obstructive Lung Disease
HFNO	High-flow nasal oxygen
ICU	Intensive care unit
LOS.....	Length of stay

List of Abbreviations Cont...

Abb.	Full term
MDI.....	Metered dose inhaler
MV	Mechanical ventilation
NNT	Number needed to treat
NPPV	Noninvasive positive pressure ventilation
O2	Oxygen
PaO2	Partial pressure of oxygen
PEEP	Positive end-expiratory pressure
Ppl.....	Plateau pressure
QoL	Quality of life
RCT.....	Randomized controlled trial
RICU.....	Respiratory Intensive Care Unit
SABDs	Short-acting bronchodilators
SaO2	Oxygen saturation
SARS-CoV-2	Severe acute respiratory syndrome coronavirus 2
SBT	Spontaneous breathing trial
SIMV	Synchronised intermittent mandatory ventilation
TdaP	Tetanus, diphtheria, and pertussis
VAP.....	Ventilator associated pneumonia
VC	Vital capacity
VV	Venovenous

INTRODUCTION

Chronic Obstructive Pulmonary Disease (COPD) is a common, preventable, and treatable disease that is characterized by persistent respiratory symptoms and airflow limitation that is due to airway and/or alveolar abnormalities usually caused by significant exposure to noxious particles or gases. COPD exacerbations are defined as an acute worsening of respiratory symptoms that result in additional therapy. They are classified as: Mild (treated with short acting bronchodilators only, SABDs), Moderate (treated with SABDs plus antibiotics and/ or oral corticosteroids), severe (patient requires hospitalization or visits the emergency room). Severe exacerbations may also be associated with acute respiratory failure (*Singh et al., 2009*).

COPD exacerbations play a central role in the natural history of the disease, affecting its overall severity, decreasing pulmonary function, worsening underlying co-morbidities, impairing quality of life (QoL) and leading to severe morbidity and mortality (*Guimarães et al., 2016*).

COPD exacerbations had deleterious effect on health status rates of hospitalization and readmission, and it can induce respiratory failure (*Vestbo et al., 2013*).

Severe COPD exacerbations necessitating invasive mechanical ventilation represent significant percentage of ICU admissions (*Liao et al., 2018*).

The outcome of patients with COPD who need invasive MV is altered by several factors such as severity of underlying lung disease, severity of acute illness, advanced age, and development of ventilator associated pneumonia (VAP) during ICU stay (*Khalil et al., 2014*).

AIM OF THE WORK

The aim of this work was to study the characteristics and clinical outcomes of COPD patients admitted to RICU in Ain Shams University Hospital and ICU Mansoura Chest Diseases Hospital.